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ABSTRACT

This document, part of a series of units designed to help students take and defend a position on public issues, discusses the changes that the railroads brought to the United States economy and society. As the first big businesses in this country, railroads had to grapple with a variety of challenges: raising enough money to launch companies requiring huge investments in equipment and property, and organizing and controlling a vast network of employees and equipment are just two. The unit is divided into seven sections. The first and last are an introduction and review respectively. The second section describes the development of the railroads, using dialogues or stories that make the atmosphere of the time more understandable to the student. After each episode is a list of activities and questions that cause the student to think about the information just learned. The third section is "the railroad game," in which students participate in a simulation of a real life business problem in which they attempt to meet the challenges that faced railroad managers. The fourth section is about consolidation and competition among the railroads. The fifth section is about railroads and government regulation. After presenting an overview of opposition to the railroad, the section discusses the economics of government intervention and the decline of the railroads. The sixth section compares what the student has learned about issues that shaped the history of the railroad and asks the students to apply them to an exercise on airline deregulation. The accompanying teachers' guide focuses on the following organizing questions: (1) To what extent should individuals and businesses be free to acquire and use property? What limitations, if any, should be imposed on how private property is used? (2) What is the public interest in business affairs? Is business competition the most effective way of pursuing that interest? Do the interests of the public and business sometimes require that competition be limited? Can cooperation among businesses effectively meet the interests of both business and the public? (3) What is the role of the government in protecting the interests of both business and the public? Does government have a responsibility to consider or mitigate the consequences of new technology it promotes? Fictional cases, primary source documents, and secondary sources are used to acquaint students with how these questions have manifested themselves in U.S. history. (DK)

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Business Competition and the Public Interest

Public Issues Series

THE RAILROAD ERA: BUSINESS COMPETITION AND THE PUBLIC INTEREST

Adapted from the Harvard Social Studies Project
by G. Dale Greenawald
under the direction of
Donald W. Oliver and Fred M. Newmann

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What is the Public Issues Series?

The Public Issues Series is a collection of units designed to help you take and defend a position on public issues. A public issue is a question involving a choice or decision over which there is disagreement. Public issues can be addressed by all the citizens of a nation or community or by officials acting for them:

- Should warning labels be placed on tapes and CDs that include sexually explicit or violent lyrics?

Public issues can also be phrased as choices for personal action:

- Should I picket a store that sells music I believe is sexist and racist?

Many issues that people have faced at other times in history are still issues today. They simply reappear in different forms. For example, questions about when people should challenge authority have persisted from the time of the American Revolution to the present. People may, however, respond to the questions in different ways; as a result, examining issues as they appeared at different times can help us better understand both the past and the present.

This unit, like others in the Public Issues Series, involves you as much more than a spectator to history. Instead, you will be a thinking, acting participant in the past, the present, and even the future.

What Are the Central Issues of This Unit?

America entered the modern era of "big business" to the rhythms of clanging railroad spikes, clattering rails, and shrill engine whistles. As the first big businesses in this country, railroads had to grapple with a variety of challenges; raising enough money to launch companies requiring huge investments in equipment and property and organizing and controlling a vast network of employees and equipment are two of many examples.

Railroads also changed the economic and social fabric of American life. By 1872, railroads – especially U.S. railroads – had made the dream of rapid travel a reality. Entire continents were spanned by iron rails. Just a scant 24 years earlier, however, railroads were virtually nonexistent outside of the United States; even there, they barely ventured more than

200 miles from the coast. The development of railroad networks created a real transformation, bringing the promise of rapid movement of people and goods and creating national markets.

Their huge size also gave railroads unparalleled power to shape daily life and commerce. In the early stages of the railroad era, few people expressed concern. Yet as railroads encircled the nation in their network of steel, business and society faced questions that persist, without final answers, into the present. These questions include:

- To what extent should individuals and businesses be free to acquire and use property? What limitations, if any, should be imposed on how private property is used?
- What is the public interest in business affairs? Is unrestrained competition the most effective way of pursuing that interest? Do the interests of the public and business sometimes require that competition be limited? Can cooperation among businesses effectively meet the interests of both business and the public?
- What is the role of government in protecting the interests of both business and the public? Does government have a responsibility to consider the consequences of new technology it promotes?

How Will We Approach the Issues in This Unit?

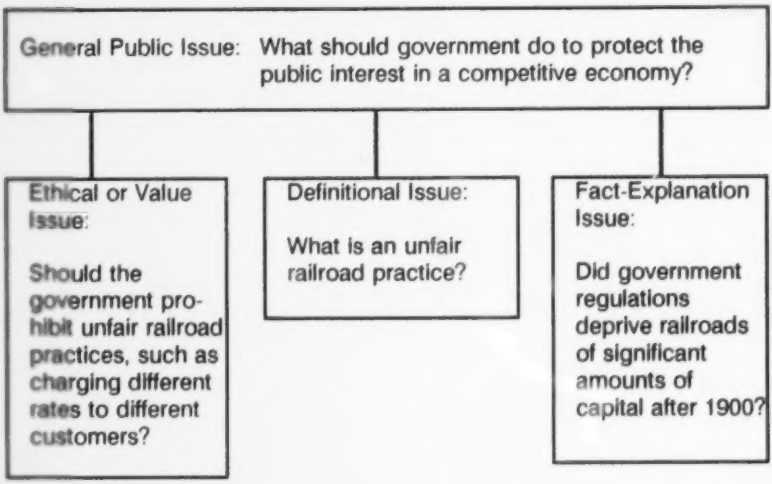
In this unit, you will take part in many discussions. Remember that not every discussion will resolve disagreements. It is often just as useful for people to learn to state their ideas with more precision and clarity and to discover precisely how their ideas differ from those of others.

No matter what the purpose of the discussion, it can become bogged down by smaller disagreements. Learning to identify the kinds of questions being raised can help keep the discussion moving. In discussing public issues, people generally look at three kinds of questions:

- Ethical or value questions. These questions deal with judgments about what should or ought to be done – judgments about rightness and wrongness.
- Questions of definition. These questions revolve around the meaning of important words or phrases.

- Questions involving facts and explanations. These questions focus on disagreements about the descriptions or explanations of events.

Examples of each kind of question are given in the diagram below:


General Public Issue: What should government do to protect the public interest in a competitive economy?
Ethical or Value Issue:
Should the government prohibit unfair railroad practices, such as charging different rates to different customers?
Definitional Issue:
What is an unfair railroad practice?
Fact-Explanation Issue:
Did government regulations deprive railroads of significant amounts of capital after 1900?

You may be starting to see that dealing with public issues involves thinking on several levels at the same time:

- Thinking about the controversial topic at hand.
- Thinking about the process of clarifying the topic by identifying the kinds of questions being raised and using strategies for dealing with them.
- Thinking about the feelings and relationships we develop toward others in the conversation and how we can deal constructively with these feelings.

Remember that the reason for discussing a public issue is not to "win" the argument but to understand more clearly your own views and the reasons that support them, as well as differing opinions.

Mr. Morrison's Proposal

In the 1830s, citizens and political leaders alike had to consider the consequences of faster transportation. What benefits and problems would railroads bring? To what extent should public funds be used to help develop railroads? Keep these questions in mind as you read the case that follows.

* * * * *

Representative William Morrison strides toward the statehouse, his boots scuffing little puffs of dust into the breeze. He is a tall, clean-shaven man in his mid-forties. He smiles and nods to friends, then climbs the steps to the sprawling wooden building. This morning, May 26, 1831, the building bustles with the activity of many people—the chatterers, the whisperers, and the dogged arguers.

It is 9:50; the debate will begin at 10:00. Slowly the people begin to file into the building. State representatives and senators go to the main Assembly room, while their families, friends, and interested spectators fill the gallery.

"Rap! Rap! Rap!...This meeting of the first session of the year of our Lord 1830 will now come to order." The Speaker's high-pitched voice echoes through the hall. The murmur subsides.

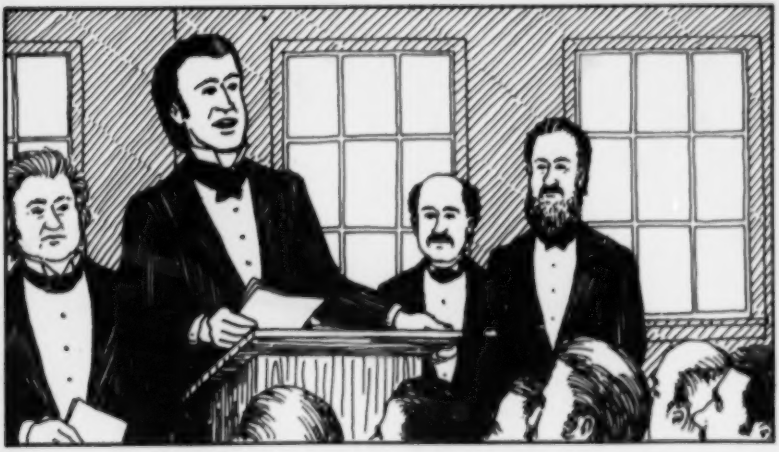
"All set, William?" Beside Morrison sits Henry Hughes, his neighbor, closest friend, and long-time fellow legislator. In contrast to Morrison, he is squat, bald, and prone to nervous gestures.

"I believe so, Henry. Here are my notes, all in order. I really wish you were to be up there instead of me."

"Nonsense, William. The people respect your opinions. Now they want to know what to think about all this recent noise concerning railroads. They want to decide. The time is ripe. Today you will convince them that a railroad is better than a canal."

"The chair recognizes the honorable representative and merchant William Morrison from the town of Louisburg."

The legislature in this case is fictional, but authentically represents the circumstances that existed in the 1830s.



Hughes pats his friend on the shoulder. Morrison stands and goes up to the speaker's podium.

"Mr. Chairman, fellow representatives, members of the gallery." Morrison's gaze sweeps across the faces of his audience. "We are confronted with an issue vital to the economic future of our great state. It is the issue of railroads."

Glancing only briefly at his notes, he reviews the growth of the U.S. canal system, then proceeds to his main topic. "A railroad would free transportation from its present dependence on water. If our great artery of commerce were a railroad, it would not be idle each winter in the grip of nature's frozen hands nor hindered by nature's parched throat in summer...."

He develops this theme, and then goes on to his second major argument: "Employing the elementary axiom that the shortest distance between two points is a straight line, it is obvious a railroad would give a shorter highway for commerce than river canals."

He is speaking firmly and clearly, pleased by the attentiveness of the legislators. Even the visitors in the gallery are listening carefully.

"Gentlemen, we cannot deny the mathematical and physical truths of nature in our inquiry. Motion in water is dependent on resistance, and the resistance of water is equal to the square of the velocity of the

moving vessel. This means, sirs, that by doubling your speed in water you will quadruple the resistance and thus require four times as many horses to pull barges twice as fast. But not so for a railroad! Gentlemen, in Great Britain it is contemplated to convey the mail and passengers at the rate of 15 miles an hour!" The audience stirs, humming with astonishment.

Morrison pauses, brushing back his hair with one palm. "But, you ask, can we afford such advantages? The answer is clear. The construction costs of a railroad would be less than a canal. I repeat—less. According to this recent issue of the *London Quarterly Review*, canal costs per mile are equal to $49,500—contrasted to typical railroad costs per mile of only $22,500. That is not all. A railroad would be constructed more rapidly. The interest charges on the money that the state would have to borrow for construction would be decidedly less."

He lays down his notes, thrusts his hands into his vest pockets, and prepares for his concluding appeal: "Gentlemen, the coming boom in western trade will enrich the whole state, bring new people within our borders, increase the value of our land, and provide markets for our goods. Our great state must act with resolution and bring this rich harvest home. Our state must build a railroad and build it now!"

The applause is strong. The speaker raps for order.

"Well done, William." Hughes stands up to greet his friend with extended hands.

"Thank you, Henry. Thank you." He pulls out a handkerchief to wipe his forehead. "But now comes Josiah Stone to undo all my work with his bellowing voice."

The crowd settles down once again as the Speaker pounds with his gavel. "The Chair recognizes Josiah Stone of the village of Columbia."

A heavyset man with red cheeks, his brown hair reaching almost to his shoulders, stands behind the podium. "Mr. Speaker, fellow representatives, friends...." Sunlight, streaming through the small windows near the roof, glints off Stone's watch chain.

"The time has come for resolute actions, according to the honorable Mr. Morrison, and I agree. Indeed the time *has* come—to build a canal connecting this great state with the west."

His timing is effective; a chuckle begins to ripple along the benches.

"It is nonsense to think a railroad can give you all these things that are promised. Fifteen miles an hour indeed! Promises! You would build and spend millions and wake up to find you had nothing. Since we haven't yet sufficient iron-producing factories in this country, the iron would have to be imported at great cost.

"This railroad is to be a public road, open to all users. Soon there would have to be two, three, or four tracks – lowering friction, perhaps, but doubling and quadrupling the taxpayers' burden. Even if the road were built, who could afford to buy their own special cars? Not the farmer, not the small independent yeoman, but only the wealthy mercantile interest. The state would build it, the people would pay, the merchants would benefit."

"Old Josiah's got 'em going," someone exclaims.

Stone's cheeks are even redder now. "Gentlemen, we are here today because of a canal. The bold and daring risk of millions of dollars and years of labor is now paying off sweetly to the state of New York. The Erie Canal has developed New York's economy, increased its trade, and paid a handsome dividend. Canals have been successful. What our own state needs is to act with resolution on the sound grounds of proven experience – and build a canal!"

He returns to his seat amid boisterous cheering.

"The Chair recognizes Andrew Brown of Honesdale."

A lean young man wearing a brown broadcloth coat comes up to the podium. A narrow beard forms a semicircle from his cheekbones to his chin.

"Mr. Speaker. Resolute actions indeed! Spendthrifts! That is more like it. If Mr. Morrison's railroad or Mr. Stone's canal are such good investments, let them raise the money privately and not tax the people of the state."

He strides impatiently back and forth on the speaker's platform.

"To be sure, the canal will aid the farmers in the south and west. They will ship their goods to eastern markets cheaply. This may be fine

for the farmers of Mr. Stone's county, but it will ruin the farmers of the northeast."

Shouts of "That's right" spring from the back of the hall.

"The farms in the western counties have the benefits of cheaper land and rich, fertile soil. Give them inexpensive transportation to the east and they will send their produce to our markets and undersell eastern farmers."

Brown stops his pacing, and points toward the audience. "The same will happen to us as has happened to New England farmers because of the Erie Canal. More and more of them are abandoning their farms. I'll not be paying taxes to ruin *my* farm!"

He strides back to his seat.

The gavel raps. "The Chair recognizes Mr. Morrison again."

Morrison stands up at his bench on the floor, his hands thrust into his pockets.

"Representative Brown feels that a private company is more suitable for the undertaking of a railroad. I must strongly disagree. This is a work of extensive, permanent, and costly character. It is calculated to have a powerful and lasting influence upon the great mass of the people. It involves many interests, private and public in nature. I doubt it would or should be accomplished by a private company."

He pauses as a child in the gallery awakens and cries briefly.

"On mature reflection, one concludes that a railroad ought to be undertaken by the state. The whole object is ultimately to facilitate the commerce between parts of the state and other sections of the Union, not to nourish speculation or profit, but to serve the general welfare. Control should be ever kept within the power of the state authority. Surely the New York State investment in the Erie is a sound one. The state of Georgia, among others, is considering state construction of rail lines. Mr. Brown's fears are not warranted."

He sits down to a mild spatter of applause.

The Speaker raps his gavel once again. "As it is near midday, I recess the assembly until 2."

Persisting Questions of History

Identifying Legislative Interests. The state legislature is about to reconvene for the afternoon debate on William Morrison's proposal. Suppose that you are among the senior legislators who are expected, because of their long experience, to speak on such major proposals as Morrison's. Four of these men are thinking about the following crucial factors in the decision they must make:

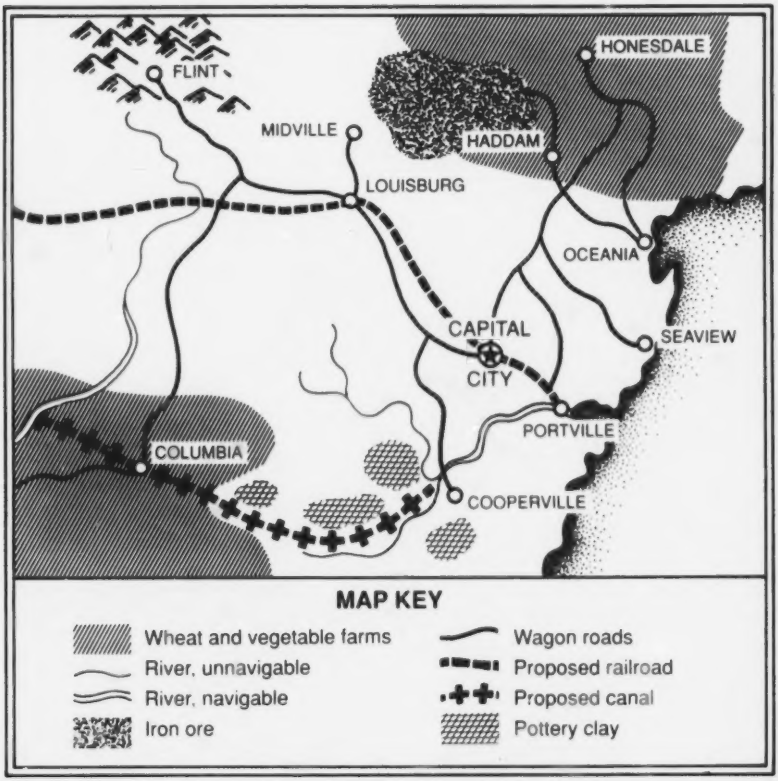
1. Representative Percival Morrill of Haddam: "My farm and my neighbors' farms are doing nicely. We're getting a bigger return each year from carting vegetables to town people. But I wonder about these iron deposits around us. We've only used what we need of them. Yet they could be the making of our fortunes."

2. Representative Horace Cooper of Cooperville: "The pottery that our people make from the fine clay around us goes down to Portville and then all the way to big cities like New York and Savannah. Maybe a railroad or a canal could take our pottery to markets in our own state and to the west. But perhaps the canal or the railroad may help *other* towns to go into pottery making too."

3. Representative Jedediah Peck of Flint: "Folks in our mountain village take care of themselves on their hillside farms. No railroad or canal is going to make *us* rich. But a lot of us – me included – could stand having an easier trip to the city."

4. Representative Eben Pollock of Midville: "Right now my town and Louisburg are just like twins. We each have good commerce with the farmers around us, and our small textile factories are humming. Yet I suspect that this railroad is going to give Mr. Morrison's town a powerful advantage over us."

Take the role of one of these four representatives. Identify the costs and benefits of each proposal for your community. Then, after studying the map of the fictional state on the next page, make your decision. Will you speak for the railroad, for the canal, for both, or for neither? Will you speak for the development of new transportation facilities by the state government or by private investors? Explain your decisions in as much detail as possible.



Comparing Public and Private Ownership. Morrison argued that public ownership of the railroad was appropriate. What reasons did he give? Do you agree with his analysis? Which of the following, currently operated primarily by the government, fit Morrison's criteria for public ownership:

- Prisons
- Airports
- Postal service
- Schools

Today, taxpayers are rebelling at the high costs of running many government "businesses." They claim that these services could be provided more efficiently by private companies. For which of the items listed above do you think this argument might hold true? Explain your reasoning.

The Railroad Comes to Louisburg

Politicians weren't the only people with opinions about railroads. Citizens had widely varying views on railroads, often based on their own self-interest, that is, whether they thought the railroad would make their own lives better or worse. As you read the case that follows, try to identify the interests that lay behind people's perspectives on the railroads.

* * * * *

Louisburg hadn't had such excitement since the tornado of '29. Ever since the first news that a railroad might be coming, the plans had been getting bigger—and so had the arguments. Sam Hundley (a farmer and the town's unofficial mayor) and others wanted to send representatives to St. Louis to persuade the railroad directors to put their line through Louisburg. In fact, Sam wanted to sweeten the request with an offer to build a depot and give the railroad 300 acres near the main street. Sam had dreams of a bustling city with enough voters to send him to the state legislature.

The main street—rutted, mired, deep in dust, or covered by snow—was actually most of what you could see of Louisburg. The two rows of buildings along it sheltered about 300 people.

The central building was the general store. It handled the items, such as sugar, salt, guns, and glass, that no one around could make. The owner closed up for a month once a year and took four wagons to the Mississippi River to pick up his next year's stock. New settlers would mean more customers. And the railroad would make it easier to get goods to sell.

The blacksmith took care of about 300 horses in the area by himself. The brickmaker provided material for the houses that were not made of mud-plaster between poles. (There wasn't much timber in the area.) Houses made of his adobe bricks lasted about three years, so he was kept busy making new ones. Louisburg also had a shoemaker, a wagonmaker, a tanner of steerhides, and a carpenter, who made most of the furniture. The saloonkeeper maintained a kitchen and a few small rooms for occasional travelers. These businesspeople kept busy and really didn't need the new business the railroad might bring. While some thought new people and goods would make Louisburg a more exciting place, others enjoyed the quiet little town. Ethan Riggs, the carpenter, had come to Louisburg when the state capital got too big for his taste.

Just about all the land in the surrounding five miles was taken up by wheat farmers. The farmers also raised vegetables for their families. They kept cows for milk, steers for meat and leather, pigs, and chickens.

A small river that ran along the edge of Louisburg provided some fish and had flow enough to turn a waterwheel in the small flour mill. The mill kept going all year grinding wheat. But there wasn't much chance that it would get more than it could handle. All the usable land around was farmed.

Just about everybody around Louisburg knew and looked out for everybody else. There were few bad disputes; people had better things to do. Thus life in Louisburg went on, day after day – until word of the coming railroad shook things up.

Persisting Questions of History

Identifying Interest Groups. Below is a list of Louisburg people. Opposite each person's name are three columns. The first asks you to predict how the arrival of the railroad might change that person's life. In the second, indicate whether the person would be for or against the railroad. Then give the reason for that position.

	Changes	For (F) or Against (A)	Reason
Sam Hundley			
Ethan Riggs			
Store owner			
Wagonmaker			
Cattle Rancher			
Brickmaker			
Farmer's Son, 16			
Innkeeper			

After group discussion (actually taking the roles of different Louisburg town people if you wish), try to decide which individuals are expressing self-interest and which individuals are expressing ideas about the general welfare of the community. Then decide if Louisburg should try to attract the railroad. Why or why not?

Evaluating an Analogy. Suppose that Louisburg is a modern community with a modern problem – automobile gridlock on the highways and air polution caused by automobile exhaust. Representatives of a new private corporation have come to the city council with an idea for building a light rail transportation system. The new corporation wants to use existing railroad lines to bring workers into the city and return them to their distant homes each day. The corporation's representatives argue that their idea will result in fewer automobile commuters. That means less crowded roads and less air pollution. Because the costs of building stations, improving the abandoned railroad lines, and other start-up activities are very high, the corporation wants the city council to assist them by giving the company a 50 percent tax break for the next ten years and by using tax dollars to subsidize the cost of tickets. The representatives argue that by paying 20 percent of the cost of each ticket, the city will actually save money in road repairs and construction, not to mention having less damage from polluted air. A poll of residents in neighborhoods close to the line indicates that many think that they would use the new light rail cars if the cost was modest. The city council, however, notices that residents in about half of the neighborhoods in town are not close to the rail lines and won't find the new transportation very easy to use.

How do you think the following people would vote on the proposal for the light rail system? Give a reason for each vote.

- An elderly resident living close to a proposed transit stop.
- The owner of a construction company specializing in highway repairs.
- An unemployed railroad equipment repair person.
- A bus driver for the metro transit authority.
- The parents of a child with emphysema.
- The owner of a downtown parking garage.

Should the town council support the new light rail system? Why or why not?

Railroad Growth, 1830-60

In 1831 the first railroad company in America completed a 17-mile line between Albany and Schenectady, NY. It allowed passengers to cut as much as eight hours from the daylong, 40-mile trip through the locks in the last section of the Erie Canal.

The railroad boom had begun. Within six months, 25 groups were applying to the New York legislature for permission to build their own lines. By 1840 track had been laid in all but four of the other 25 states.

* * * * *

How was a railroad built? Clearly no individual could personally afford average costs that had risen as high as $40,000 a mile. Several persons could form a partnership and raise the funds. But few individuals had that much money or the boldness to make such a risky long-term investment. The most common method of building a railroad, therefore, was for a group of men to request that the state legislature vote a charter of incorporation for them. This established a *corporation*, a lasting business organization with the right to carry on business and accumulate funds through the sale of stocks and bonds to people interested in sharing the profits.

Purchasers of stock would be reassured by the fact that, in case the railroad went bankrupt, they would have *limited liability*—they would lose only the cost of their shares instead of having all their personal property put up to pay the debts of the business.

Beyond putting up money, these shareholders generally had no voice in the running of the railroad. Control of the railroad's policy rested in the hands of managers named by the few individuals who owned a majority of the stock. (Often the two groups were the same.) The managers decided, within the limits of their charter, where and how far to build the line, and what rates to set.

By the 1850s railways were also turning with increasing frequency to a second source of money—banks. The big banking houses of the east, many of which were connected in turn to wealthy European banks, regarded railways as a good risk. More and more they consented to make loans to railroads or handle the bonds by which the railroad corporations borrowed from private investors.

A third source of help was government – federal, state, and local. State and local legislatures were eager to offer every privilege to railroads. After all, a town with a train passing through it would almost surely receive more business. Travelers would buy food at its restaurants and sleep at its hotels. Settlers would favor it over an isolated town. Farmers would come to town with crops to be stored and shipped. The growth of population and business meant more tax proceeds for the state.

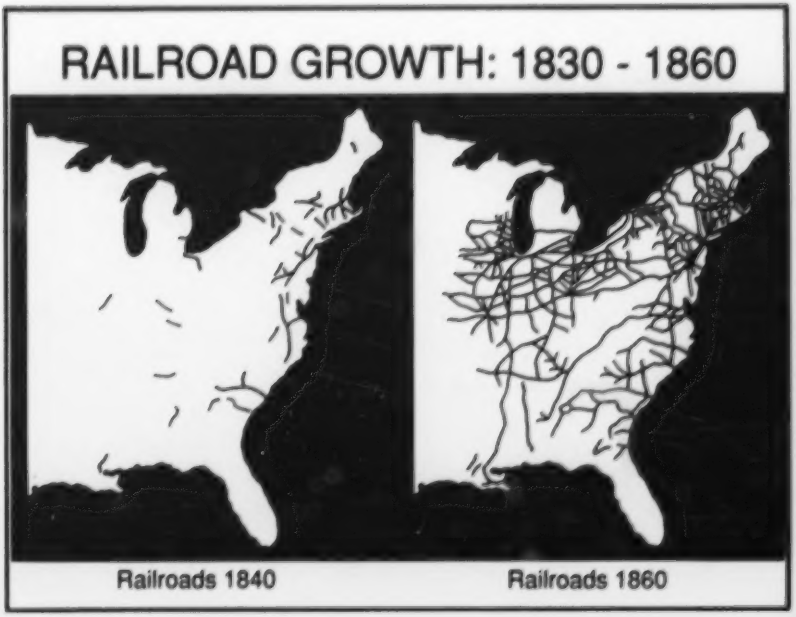
State and town officials wooed railway managers with attractive terms. Many states bought railroad stocks, granted huge loans, gave public lands for the railroad to build on or sell, granted a monopoly of traffic between the terminals (promising that the railroad would have no competitors), or allowed the road to issue bank notes for financing the construction. In order to obtain these privileges, railroad managers formed *lobbies* to persuade or sometimes bribe legislators.

Most early lines served coastal cities in the East. There the population was most dense and the volume of goods shipped between the ports and the interior was greatest. In 1840 Pennsylvania had the largest railroad mileage of any state (754), with New York second (374). It was an impressive growth from almost nothing ten years earlier. Yet it was hardly a "network" of transportation. A rail trip from Boston to Georgia, broken by transfers to steamers and stagecoaches, took a week.

In 1840 track mileage totaled almost 3,000 miles. By 1850 it had more than tripled. By 1860 it had more than tripled again, reaching beyond 30,000 miles. This boom was taking place primarily in the wide-open spaces of the midwestern states, where the farmers sought to move their crops to the big urban markets in the east. By the mid 1850s the United States, with five percent of world population, had almost as much rail mileage as the rest of the world.

Most of the new track was laid in Indiana, Illinois, and particularly Ohio, which in 1860 became the state with the most rail mileage. By then, New York and Pennsylvania were third and fourth. (Since it had financed the Erie Canal, New York's state government did not seem anxious to jeopardize the investment by encouraging railroad construction.) By the early 1850s four rival lines had succeeded in crossing the Appalachian Mountains, thus connecting the coast and the interior. The race between Baltimore, Philadelphia, New York, and Boston to tap the rich Western trade had ended in a virtual tie.

What were the effects of this railway expansion – labeled by historians the "transportation revolution" – on Americans at the time? Con-



sider a farmer living outside Cincinnati, Ohio. In 1817 if he had wanted to bring his crops to the largest market, New York City, he would have had to be a very patient farmer. Having reached Cincinnati, he would have loaded his goods on a keelboat to Pittsburgh, then transferred them to a wagon to Philadelphia, then gone alternately by wagon and river to New York City. At last he would have arrived – 50 days after he had set out.

Merchants in Atlantic ports benefited just as much from the railroads. In 1815 they paid 70 cents per ton per mile to transport goods overland to customers in the interior. Although these wagon rates did drop – to 20 cents a ton-mile in the 1820s and to 15 cents in the 1850s – even this was high in comparison to what railroads charged. The Boston and Worcester Railroad in 1833, for example, had an average ton-mile rate of 6 1/4 cents. By 1850 the average rate in New York was a bit more than 4 cents. In 1860 it was only 2 1/4 cents.

The growth of railroads changed much of the economic organization of the United States. The growth of large textile factories like those in Lowell and Lawrence, Massachusetts, employing 100 to 1,000 people,

was quickened. The railroads could deliver the goods at a price that was cheaper than the buyers' own homespun.

Railroads encouraged the growth of businesses, businesses employed workers, workers needed housing and food. Not only did railroads promote economic development by moving people and goods quickly and more cheaply, they also helped by buying rails, engines, and other items needed to operate. New businesses emerged to address these demands. The workers in these factories as well as the railroad workers needed food and shelter that encouraged even faster economic growth. Cities sprang up where a few years before only woods and farms had existed. And through it all cut the shining iron rails.

Persisting Questions of History

Rating Policies. The case describes five methods by which state and local governments helped railroads:

- purchase of stock
- loans
- grants of land
- grants of monopoly
- permission for railroads to issue bank notes

For each of these approaches, consider the benefits and disadvantages from the perspective of the government, the railroads, and citizens. Based on your analysis, which approach do you think best served the public interest? Explain your choices.

Drawing Parallels. The governor of Massachusetts has proposed that the Massachusetts Turnpike be run by a private business. Find out some of the arguments for and against this proposal. Do you think that governments – federal, state, or local – should experiment with turning the construction and operation of highways over to private developers? Why or why not? If this experiment were attempted, do you think that government should give the private developers subsidies or aids such as those given the railroads? Why or why not? Explain why you favor any form of aid. Who would assume liability for structural or design problems – the government or the private developer?

The Challenge of Running a Railroad

Railroad executives faced challenges unlike any business leaders had dealt with before. They needed rules and processes for situations as diverse as keeping track of equipment and setting time schedules. New technologies were being used—technologies that required large capital investments and skilled workers. Safety was also a concern.

As you read the story below, think about the challenges faced by the railroad companies. If you had been a railroad executive, how would you have met those challenges?

* * * * *

President Stevens scratched his head and thought long and hard about the problems of being a railroad president. No one had ever had to deal with the issues he faced. He had to make decisions that might mean the success or failure of the Turtle Creek, Lone Pine, and Western Railroad.

He didn't want to make these decisions without getting the advice of the board. After all, they'd invested a lot of money in this railroad and they expected to make a lot of money. "Well, they could darn sure have some of the responsibility, too," thought Stevens. He called a board meeting and made his presentation.

President Stevens got the board members' attention by starting with what mattered most to them—MONEY. "Gentlemen, as you know, a lot of money has been invested in buying equipment for this line. You and the other investors rightfully expect to see a profit. We must be careful in how we spend money. The state has granted us a charter that gives us a monopoly, but that doesn't guarantee success. We still have more problems to solve than I care to count. Please start thinking and let's decide how to make this railroad operate."

Isiah Cromwell, the largest stock holder, suggested that the first issue was making certain that the new extension line was constructed as inexpensively as possible. Stevens watched Amos Jackson, the bank president, puff out clouds of cigar smoke as he paused and then suggested, "As you know, it's 60 miles between Turtle Creek and Lone Pine.

This case is fictional, but authentically represents circumstances of the times.

If we can make a straight line with just one track that will save a lot of money. Buying land and the tracks themselves costs more than the locomotives and cars. Fortunately, we don't have to go around mountains or deep valleys, or – even worse – rivers where we'd have to stop the tracks and transfer the load from one train to another." Jackson continued to complain about engineers who still hadn't developed bridges that could hold the weight of the newer, more powerful engines and larger cars.

Stevens nodded in agreement and asked Amos how he proposed to keep the tracks from moving as the ground froze and thawed. "We can't afford those expensive iron rail holders the British use because we don't have enough skilled iron workers," said Stevens. Amos suggested using the wooden ties and iron rails shaped like a "T" that seemed to be working on a line over in the Lehigh Valley. They were certainly better than the first wooden rails with strips of iron on top.

Stevens thought that the new iron rails might work, but he was concerned about safety. With traffic moving in both directions on one track, it was important to have sidings where trains could pull over as other trains passed. But how was an engineer to know when to pull onto a siding? There had to be a way of signaling when a train was coming and letting each train crew know when and where to stop. And speaking of safety, the new high-pressure boilers operated under tremendous pressure; if they weren't carefully built and maintained, they had a nasty habit of blowing up. They also allowed the engines to move faster; the increased speed sometimes contributed to disastrous accidents. Why, hardly a day passed without reading about a horrible crash on some railroad.

"I suppose we have to worry about safety on the new line. I certainly don't want some fool newspaper editor, or even worse the government, telling me what I have to do to be safe," harumphed Mr. Stevens. "We railroad men certainly know more than a common citizen who fancies himself an expert on all things. They can't tell me how to run my railroad when I've spent my life learning how to do it. I learned the hard way – from experience. They don't have that."

Stevens paused. He certainly didn't want to unduly alarm the board, but he did want them to be aware of the complex problems of safety. He also wanted them to help him with some of the organizational problems. He glanced at the list of equipment for the new line, equipment that would increase the size of the railroad almost ten times:

- 17 locomotives
- 64 passenger cars (including 2 with rocking chairs)
- 7 baggage cars
- 64 freight cars
- 24 dump cars used to repair the road
- 12 snow scrapers
- 11 car houses used to repair and store cars
- 9 transportation houses (passenger offices, etc.)
- 9 engine houses for repairing locomotives
- 8 shops, including 3 blacksmith's shops and 3 carpenter's shops
- 5 woodsheds
- 12 water tanks
- 3 wharves
- 3 taverns
- 47 houses for workers
- 2 houses for superintendents

He wanted to know how in the world the railroad could keep track of all of that equipment, get it to the right place at the right time, make certain that it worked properly, and employ workers who knew what to do with it. Stevens could just see the board members scratching their heads over this one. None of them had more than a dozen or so employees. Izeka Rodgers, though, had worked with a lot of men. Maybe he'd have an idea.

How to set rates was also a problem. It cost almost as much to ship a ton of grain 10 miles as it did to ship it 100 miles, since a lot of the cost was in loading and unloading the cars. Even if Stevens could figure out how to set rates for short and long distances, he still had to think about other fare issues – what should the relationship be between passenger and freight rates, for example. Could he charge a farmer who could send his grain on a canal boat as much as one who could only ship on the railroad? Should he charge as much to ship in the fall when there weren't enough cars to haul all of the farm goods as he did in the winter when traffic was light? There had to be a sensible way to set rates, but he sure didn't know what it was.

Collecting the money was also a headache. How could a railroad collecting nickels, dimes, and quarters in dozens of different places every day make sure that all of the money was collected and turned into the main office? What was to stop a local ticket agent from collecting

receipts for 500 pounds of grain, saying the farmers shipped 100 pounds, and pocketing the difference?

Ezra Hamilton coughed and Stevens could almost see him worrying about his investment. In his high squeaky voice, Hamilton noted that even if Stevens figured out how to collect and keep track of the revenue from the far-flung parts of the railroad, he still needed to pay bills, keep records of expenses and income, and keep track of a seemingly endless list of other concerns. "Mr Stevens, sir, what you need to deal with most of these problems is a manager, or rather a system of managers—people who oversee the work of others, tell them what to do, and receive information from them; people who make sure that everything and everyone is working the way they should; people who can develop systems for accounting, scheduling, and timing," said Hamilton.

"But," said Stevens, "just anyone won't do. Why we need ah, ah, ah, oh darn, where is that list of equipment? Oh, here it is under the desk! Yes, we'll need superintendents, engineers, bar keepers, ticket agents, baggage masters, bridge tenders, telegraph operators, guards, switch tenders, conductors, brakemen, depot agents, stewards, mechanics, woodcutters, and storekeepers. Many of these positions require well-trained, reliable people. Just think, most of these jobs didn't exist ten years ago. That is progress, thanks to the railroad."

"But, Mr Stevens, even if you find these kinds of skilled people, you'll need rules. Yes, a railroad doesn't just run itself, Mr. Stevens; it needs regulations, rules, structures that tell folks what to do so that they can work together. We can't have folks willy-nilly throwing switches or deciding on their own what it costs to send a chicken coop to Lone Pine or what time the train will leave."

As they thought, the board and Mr. Stevens identified all sorts of rules they would need—rules about checking baggage, when one train should wait for another, what to do if two trains met, speeds for different sections of the line, rules for ticket sales, work rules, what records to keep, signals, fines and disciplinary action to guarantee that workers followed the other rules. The list seemed endless, but without it the railroad couldn't function. An error of even a few minutes could mean disaster.

Persisting Questions of History

Establishing Safety Rules. Do you agree with Stevens that the public and government shouldn't tell the railroads how to operate safely since they couldn't have the knowledge and experience he has? Explain your answer. Would your answer apply to operation of other forms of transportation, such as cars, buses, and airplanes? What about such other technologies as nuclear power plants or genetic engineering labs?

Determining a Fair Rate of Return. What do you think is a fair return on money invested in the railroads? If a railroad makes less profit because it has spent money to improve safety, should rates be increased to guarantee a "fair return" to the investors? Should profits ever be limited? Who should make decisions about questions like these?

Establishing Rates. Deciding what to charge for various services was one of the challenges faced by the early railroads. They wanted to charge enough to make a profit, but not so much that people could not afford their prices. Another dilemma was that unless prices were the same for everyone, people charged that the railroads were being unfair. Yet sometimes there were reasons for charging different prices.

Many of these price-setting problems persist today. Read the following cases. Decide in which instances you think the pricing policy is fair. Then develop a definition of *fair pricing* based on the criteria you used in making your decisions.

- The same product costs twice as much in a small town with only one store than in a large city with many stores.
- The same product costs more in an inner city neighborhood than in the suburbs.
- A bar sells women drinks at half price.
- The maker of a new "hot" videogame charges the maximum price it thinks people will pay for the game.
- The maker of a new drug for use in treating AIDS charges the maximum price it thinks people will pay for the drug.
- Customers at a lumberyard get discounts based on how much they buy.
- Airline tickets cost less if purchased in advance.

The Railroad Game

Railroad competition was bitter in the 1870s. Could you have met its tough demands? This "game"—simulating a real-life business problem—asks you to meet the challenges that faced railroad managers.

* * * * *

Four railroads run between Oretown and Steeltown. The four independent lines compete for the business of carrying ore from the mines in Oretown to the mills in Steeltown.

The class divides into four groups. These groups take the parts of the managers of the four railroads. The competitive "game" the groups will play is divided into rounds. Each round represents one business day.

(*Editor's Note*: Rules make easier reading after the game begins. Don't try to memorize all the rules at the start. Skim the rules first for general understanding. Then refer back to the rules as play goes on. PLAY THE GAME, don't talk about it at great length before starting.)

The railroads bid each day (round) for that day's business. The mine owner (teacher) each day awards the job of carrying all or part of the output of the mine to whichever railroad or railroads he/she wishes. Presumably business goes to the railroad or railroads that bid the lowest. The winner of the game is the railroad that makes the most money.

All trains consist of one engine and ten ore cars. Railroad A has two available trains. Railroad B has two available trains. Railroad C has three available trains. Railroad D has three available trains. An engine can pull ten cars; no money can be saved by using fewer than ten cars.

Each railroad has a *breakeven point*, determined by the fixed costs and variable costs it must pay from its income. The railroads have already cut these costs as far as they can. These costs are shown on the separate expense tables given to each railroad by the teacher.* At the *start* of the competition, each railroad keeps its business information secret from the other railroads.

*Expense tables and other forms are provided in the teacher's guide for this unit.

Each railroad must submit a bid for the day's business. The bid should, ideally, be high enough on each day's shipment to meet costs and make a profit, yet low enough to get the contract for the shipment if possible. A railroad's bid may vary according to the number of trains the mine owner will use.

The mine owner has a contract with the mill owner in Steeltown. The roundtrip run by train takes a full day. The contract says that the mine must ship a minimum of 20 trainloads to the mill each week (seven rounds). The most the mine can produce is five trainloads of ore a day.

In other words, the mine owner *must* send at least 20 trainloads a week, but *cannot* send more than 35 trainloads a week.

The mine owner, if he cannot come to terms at all with any railroad, can send ore to Steeltown in wagons he owns. But this method is crude. The mine neither makes profit nor loses money by using wagons – but the mine owner wants to make a profit.

The sequence of competition is as follows:

A. Mine owner posts the number of trains of ore he would like to ship in the first day. He may ship only part of the number posted if he feels the bids are too high.

B. Mine owner goes separately to each of the four railroads once to bargain with them in an attempt to get the lowest bid for carrying the ore. The final price offered by each railroad must be written down on a slip of paper.

C. Mine owner may return to any or all of the four railroads to give them information, *accurate or inaccurate*, about the bids submitted by other railroads. The mine owner may do this in an effort to get even better prices. Each railroad may submit revised bids in writing if the managers think it desirable to do so.

D. Mine owner announces which railroad gets how much business and pays the railroad or railroads the amount of money due to each. He does *not* announce how much money changes hands or what the winning bid was. At this point, the mine owner's clerk tallies the cost, income, and cash balance of each railroad on the tally sheet provided.

E. Each railroad has two kinds of expenses, fixed costs and variable costs, listed on its expense sheet. Fixed costs include such items as

maintenance of equipment, interest on bonds, principal on bonds, and stock dividends.* Variable costs include crew wages, fuel, water, and supplies. These costs depend on how many trains a railroad uses. Thus they are payable only if a railroad gets some business in a day. Each railroad must subtract all costs from its cash accounts at the end of each round.

F. If at any point a railroad cannot make a required payment, it is considered to be bankrupt and is eliminated from the game.

G. After each round, one representative from each railroad may meet with representatives from other railroads to discuss the prices they will bid for the next round, and other matters of competition and cooperation. Each railroad sends a representative only if it wishes to do so.

H. Return to step A and begin the next round.

*In actual business practice, certain bond payments and stock dividend payments can be postponed for a time. For the purposes of this game, these costs must be paid each day.

Persisting Questions of History

Defining and Evaluating Competition. The following list includes many business methods used by railroads. Put a plus mark (+) in front of those methods that you think will increase competition, and a minus mark (−) in front of those that you think will reduce competition among railroads. Then put a letter **R** in front of the methods you think are good for the railroads. Put a letter **U** in front of those you think are good for railroad users. (You may rate some methods as good for both railroads and users.)

- General cutting of rates
- Cutting of rates for special customers
- Rebates to customers who demand them
- Regular time schedules and regular train sizes, regardless of profit
- Elimination of duplicate lines and services
- Regular pooling of profits by several railroads
- Pooling of profits by railroads in seasons when other means of transportation compete
- Use of bigger trains to reduce the number of railroad runs
- Use of the same terminals and the exchange of cars by different railroads
- The establishment of longer runs by railroads
- Charging customers in "competitive" regions less unit cost than customers in "uncompetitive" regions
- Charging customers less for "long hauls" than for "short hauls"

How many of the methods you consider good tend to *increase* competition? How many of the methods you consider good tend to *reduce* competition? On the basis of your ratings, do you consider competition good or bad for the railroads and the public? Why?

Balancing Law and Ethics. Sometimes two railroads agreed to charge the same rates so both could gain enough business to keep from going bankrupt. If one railroad violated that agreement, the courts refused to punish the railroad that broke the agreement. Do you agree or disagree with this court decision? Why or why not?

In light of your judgment on the railroad case, consider these modern contract situations:

a. A young man proposes marriage to a young woman and buys her an engagement ring. Five years later he tells her he has decided to remain a bachelor. She sues him for breach of promise.

b. A city council signs an agreement to buy a road scraper. The council members then find they can buy the same piece of equipment at half the price from another dealer. They buy at the lower price. The first dealer sues.

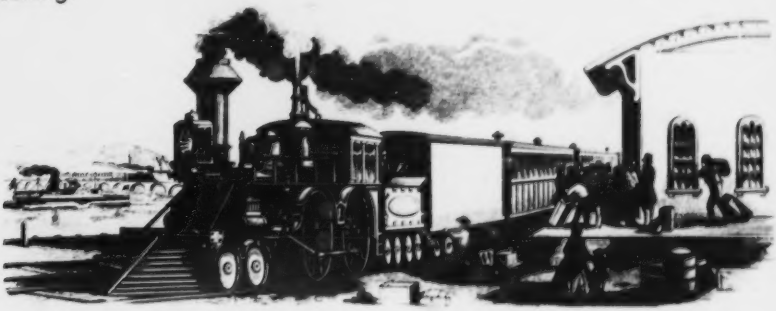
c. All ten machine operators at a small factory decide they are being asked to work unreasonably hard. They all sign an agreement to slow the pace of their work. But one operator begins to work harder than he did before and soon wins a promotion. The others sue him.

d. A new sales manager signs an employment contract with a company. A typing error in the contract, unnoticed by either party at the signing, lists the manager's salary as $100,000 rather than $10,000. Months later the manager discovers the error and sues to get the higher salary stated in the contract.

How should the courts decide in each case? Give the reasons why you would or would not support each contract.

Railroad Growth and Consolidation, 1860-90

An "iron clasp" tied together a nation – but the renewed railroad boom also involved ramshackle haste, overvalued stock, and fierce rate-cutting.



* * * * *

Until the 1850s, the federal government played almost no role in the development of railroads. Until then most of the track construction took place in areas under state control. Most railroads were relatively short and served farmers, merchants, and manufacturers in regional economies.

Then railroads reached the edge of the western territories, which were under federal control. From there, railroad builders looked eagerly toward the Pacific. The far coast's gold mining, settlement, and ocean trade seemed to offer profitable opportunities. Citizens began dreaming of a transcontinental railroad.

During the Civil War, railroads gained new importance. War now took on a new pace, the speed of locomotives rather than horses. During the four-year conflict, the nation's railroad network increased to 35,000 miles. It became more coordinated – and more profitable.

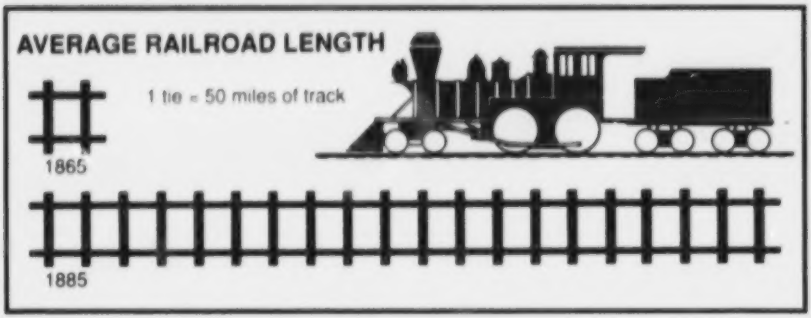
In the process, the Republican majority in Congress fulfilled a promise from the party's 1860 platform. In 1862 it passed, and President Lincoln signed, the Pacific Railway Act. The act provided for the construction of a transcontinental railroad. The new railroad was to bind California to the free states in the East and to provide for the movement of troops and government supplies in the western plains. Two com-

panies were to build it, the Union Pacific westward from the Missouri River, and the Central Pacific eastward from Sacramento, California. For each mile of track built, Congress would give ten alternate sections of public lands to the companies. (Government lands in the west were divided into *townships* of 36 sections. Each section equaled 640 acres.) The grants of land—doubled by Congress in 1864—were to be sold by the railroads to finance their construction projects. In addition, the law provided for a 30-year government loan in U.S. bonds, totaling $16,000 to $48,000 per mile, depending on terrain.

By 1869, the transcontinental railroad was complete, sparking a renewed railroad boom. Between 1867 and 1873, more than 30,000 miles of new track were laid and opened to traffic. The largest increase took place in the vast distances of the west. The 3,000 miles of track in this region in 1865 quadrupled in the next five years.

The most important characteristics of this enormous expansion were speed and money. The federal government granted loans or land only when mileage was completed. Thus, railroads inevitably stressed rapid construction and length of track. As a result, most of the roads that were built on government land were poorly made, including needless curves, shifting roadbeds, and spreading rails, all of which soon had to be repaired or replaced. Yet the companies felt that this haste was justified by the fact that they had no traffic, and thus no income, until the railroad was finally in operation. Moreover, they said, towns in the west were separated by long stretches that contained few or no people and thus brought no income. For both these reasons, railroad builders felt they had to deal with a risky investment as best they could.

Most of the money support for the postwar railway expansion did not come from the federal government, however. It came instead from private investors, often a few very wealthy men. Seeing the chance for



great returns, these individuals began to indulge in elaborate railway dealings. Perhaps the most common technique was to buy a controlling proportion of a railway's stock and then to sell new, "watered" stock at a handsome profit. (The term "watered" stock came from the older practice of giving large amounts of water to cattle just before they were taken to market to be sold by weight. Railroad managers gave the term a new twist by pumping up the price of stock to a point far beyond the value of the railroad equipment that the stock was supposed to represent.)

Not only did the railroad boom witness watered stocks and other financial shenanigans, it also fostered competition – intense, fight-to-the-death competition. Towns that once were delighted to have one line now had two, three, or more. People in these locations could choose among the competing railroads, which were thus forced to adopt a wide range of strategies to attract customers. Reducing prices, or cutting rates as it was called, was one strategy that railroad financiers often used in order to profit at the expense of rival lines. Rate wars were often started by bankrupt lines, managed by court-appointed receivers. (Creditors often chose to keep railroads going in this way, rather than settling for partial payment of the debts owed to them by a defunct railroad.) Not having to meet interest payments on their debts for the time, and not having to pay dividends to their stockholders, these bankrupt lines could afford rate-cutting attempts.

To those who shipped or traveled by railroads, the fierce competition among various lines seemed to insure that the public would benefit. As a leading authority on railroads remarked: "The whole question of the power of railroads to oppress was settled when their construction was thrown open to all. *One* road might oppress; twenty, competing for the same business, cannot."

How was railroad construction "thrown open to all"? The method was simple. States increasingly passed general incorporation laws, permitting any group of persons to associate as a "body corporate" in order to construct and operate a railway. No longer did incorporation require chartering by special legislative act. Instead, anyone could build a railroad anywhere he wanted; 12 groups could build 12 parallel lines if they wanted. Thus, the legislatures hoped to regulate oppressive railroad practices by relying on what a witness in Congress called "one of the best laws known to economics and most beneficial to the public...the law of competition."

While competition may have benefited the public, it certainly didn't seem to be benefiting the railroads. With recession creating more finan-

cial pressure, railroad executives worked feverishly to raise earnings and lower costs. They established pools, dropped unprofitable lines, cut wages, and laid workers off. But the competitive pressure remained. Many railroads went bankrupt and eventually were either bought by other, stronger railroads or became the property of the banks that had provided the money to start them. Some banks that controlled many railroads tried to consolidate them. Even the larger railroads became increasingly owned by banks, which provided the funds necessary for their growth or for the purchase of weaker rivals. By the late 19th century, a national railroad network dominated by a few large lines and heavily influenced by banks emerged.

Persisting Questions of History

Analyzing Policy. Many states made the creation of railroad corporations easier in order to stimulate more competition among railroads. On the basis of your reading of this case, list the aspects of railroad competition that you consider to be "good" for the general public. Then list the aspects of railroad competition that you consider to be "bad" for the general public. After listing these aspects, do you think general incorporation laws were wise or unwise?

Gathering Evidence. Consider the business factor called *ease of entry*—the circumstances, such as needed investment, available aid, and existing competition that determine whether a business can be started successfully. After weighing information from reference books, local interviews, and personal observations, rate these modern businesses from 1 to 10 for ease of entry, with 1 being the business that has the greatest ease of entry.

- telephone company
- pizza delivery business
- housecleaning service
- fitness center
- bicycle shop
- advertising agency
- airplane engine factory
- real estate sales agency
- radio station
- lawn care service

Support your ratings with evidence. Next, rate each business on the basis of how important it is for society. What criteria would you use to decide how important a business is to society? Possible criteria might be the number of jobs it creates, necessity of goods or services it provides, presence of alternative goods or services, potential to promote growth of other business, extent to which it improves people's lives.

Where would railroads or airlines be on your list? What does this suggest about the need for government to make entry easier and about the scale of resources needed to operate a railroad or airline? Should businesses that require a high level of government support to start up continue to be supported with public funds? When should support be withdrawn? What degree of control should the government have over business it supports?

Dyke's Bonanza

While many of the railroads were being crushed by the economic forces of competition, many railroad users also found themselves in an economic vice. Because of losses on competitive lines, railroads tried to recover those losses on lines without competition. The reading below views the problems of competition from the perspective of a consumer trapped by a monopoly.

* * * * *

Dyke reaches the Post Office in Bonneville towards 11 o'clock but he does not at once proceed to Ruggles' freight office to pick up his shipment of hop-poles. It is seldom he gets into town, and when he does he permits himself the luxury of enjoying his evident popularity. He meets friends everywhere, in the Post Office, in the drug store, in the barber shop and around the court-house.

At the drug store, which also keeps a stock of miscellaneous stationery, his eye is caught by a "transparent slate," a child's toy. "Now, there's an idea, Jim," he observes to the boy behind the soda-water fountain; "I know a little tad that would just about jump out of her skin for that. Think I'll have to take it with me."

"How's your hops getting along?" the other asks, while wrapping up the package.

"Bully," declares Dyke. "I'm dead sure of a bonanza crop by now. The rain came *just* right. I actually don't know as I can store the crop in those barns I built, it's going to be so big. After I've paid off the mortgage – you know I had to mortgage, yes, crop and homestead both, but I can pay it off and all the interest to boot – well, and as I was saying, after all expenses are paid off I'll clear big money. Yes, sir, I *knew* there was boodle in hops. You know the crop is contracted for already. Chap in San Francisco will take it all, and at the advanced price."

"I suppose you'll stay with hops now?"

The case is adapted from The Octopus: A Story of California by Frank Norris (New York: Grossett and Dunlap, 1901).

"Right you are. I'm planning ahead for next year already. I think I'll buy a piece of land off Quien Sabe and get a bigger crop, and build a couple more barns, and, by George, in about five years time I'll have things humming. I'm going to make *money*, Jim."

He emerges once more into the street and goes up the block leisurely. He fancies that he can feel he is considered of more importance nowadays. He is no longer a subordinate, an employee. He is his own man, a proprietor, an owner of land, furthering a successful enterprise. No one has helped him; he has followed no one's lead. He has struck out unaided for himself, and his success is due solely to his own intelligence, industry, and foresight. He squares his great shoulders, till the blue denim of his jumper all but cracks. Under the visor of his cap, his blue eyes twinkle with vast good-nature. He feels that he makes a fine figure as he goes by a group of young girls on their way to the Post Office. He wonders if they look after him, wonders if they have heard that he is in a fair way to become a rich man.

The chronometer in the window of the jewelry store warns him that time is passing. He turns about and makes his way to Ruggles' office, which is the freight as well as the land office of the P. and S.W. Railroad. As he stands for a moment at the counter in front of the wire partition, waiting for the clerk to make out the order for the freight agent at the depot, Dyke is surprised to see a familiar figure in conference with Ruggles himself.

The figure is that of a middle-aged man. Dyke recognizes S. Behrman. The banker, railroad agent, and political manipulator seems to Dyke's eyes to be more gross than ever. His smooth-shaven jowl stands out big and tremulous on either side of his face; the roll of fat on the nape of his neck, sprinkled with sparse, stiff hairs, bulges out with greater prominence. His great stomach, covered with a light brown linen vest, stamped with innumerable interlocked horseshoes, protrudes far in advance. He wears his inevitable round-topped hat of stiff brown straw; even from where he stands Dyke can hear his loud breathing and the clink of the hollow links of his watch chain upon the vest buttons of imitation pearl, as his stomach rises and falls.

"I'll be wanting some cars of you people before the summer is out," observes Dyke to the clerk as he folds up and puts away the order that the other had handed him. He remembers perfectly well that he has arranged the matter of transporting his crop some months before, but his role of proprietor amuses him and he likes to busy himself again and again with the details of his undertaking.

"I suppose," he adds, "you'll be able to give 'em to me. There'll be a big wheat crop to move this year and I don't want to be caught in any car famine."

"Oh, you'll get your cars," murmers the other.

"I'll be the means of bringing business your way," Dyke goes on; "I've done so well with my hops that there are a lot of others going into the business next season. Suppose," he continues, struck with an idea, "suppose we went into some sort of pool, a short of shippers' organization, could you give us special rates, cheaper – say a cent and a half?"

The other looks up. "A cent and a half! Say *four* cents and a half and maybe I'll talk business with you."

"Four cents and a half," returns Dyke, "I don't see it. Why, the regular rate is only two cents."

"No, it isn't," answers the clerk, looking him gravely in the eye, "it's five cents."

"Well, there's where you are wrong, m'son," Dyke retorts, genially. "You look it up. You'll find the freight on hops from Bonneville to 'Frisco is two cents a pound for carload lots. You told me that yourself last fall."

"That was last fall," observes the clerk. There is a silence. Dyke shoots a glance of suspicion at the other. Then, reassured, he remarks: "You look it up. You'll see I'm right."

S. Behrman comes forward and shakes hands politely with Dyke. "Anything I can do for you, Mr. Dyke?"

Dyke explains. When he is done speaking, the clerk turns to S. Behrman and observes, respectfully: "Our regular rate on hops is five cents."

"Yes," answers S. Behrman, pausing to reflect; "Yes, Mr. Dyke, that's right – five cents."

The clerk brings forward a folder of yellow paper and hands it to Dyke. It is inscribed at the top "Tariff Schedule No. 8," and underneath these words, in brackets, is a smaller inscription, *Supersedes No. 7 of Aug. 1.*

"See for yourself," says S. Behrman. He indicates an item under the head of "Miscellany."

"*The following rates for carriage of hops in carload lots,*" read Dyke, "*take effect June 1, and will remain in force until superseded by a later tariff....*

In the list printed below, Dyke sees the rate for hops between Bonneville and San Francisco is five cents. For a moment Dyke is confused. Then swiftly the matter becomes clear in his mind. The railroad has raised the freight on hops from two cents to five.

All his calculations as to profit on his little investment he has based on a freight rate of two cents a pound. He is under contract to deliver his crop. He cannot draw back. The new rate eats up every cent off his gains. He stands there ruined.

"Why, what do you mean?" he bursts out. "You promised me a rate of two cents and I went ahead with my business with that understanding. What do you mean?"

S. Behrman and the clerk watch him from the other side of the counter.

"The rate is five cents," declares the clerk doggedly.

"Well, that ruins me," shouts Dyke. "Do you understand? I won't make 50 cents. *Make!* Why, I will *owe* – I'll be – be – That ruins me, do you understand?"

The other raises a shoulder. "We don't force you to ship. You can do as you like. The rate is five cents."

"Well – but – damn you, I'm under contract to deliver. What am I going to do? Why, you told me – you promised me a two-cent rate."

"I don't remember it," says the clerk. "I don't know anything about that. But I know this; I know that hops have gone up. I know the German crop was a failure and the crop in New York wasn't worth the hauling. Hops have gone up to nearly a dollar. You don't suppose we don't know that, do you, Mr. Dyke?"

"What's the price of hops got to do with you?"

"It's got *this* to do with us," returns the other with a sudden aggressiveness, "that the freight rate has gone up to meet the price. We're not doing business for our health. My orders are to raise your rate to five cents, and I think you are getting off easy."

Dyke stares in blank astonishment. For the moment, the audacity of the affair is what most appeals to him. He forgets its personal application.

"Good Lord," he murmurs, "good Lord! What will you people do next? Look here. What's your basis of applying freight rates, *anyhow*?" He suddenly vociferates with furious sarcasm. "What's your *rule*? What are you guided by?"

At the words, S. Behrman, who has kept silent during the heat of the discussion, leans abruptly forward. He emphasizes each word of his reply with a tap of one forefinger on the counter before him: "All – the – traffic – will – bear."

Dyke steps back a pace, his fingers on the ledge of the counter to steady himself. He feels himself grow pale, his heart becomes a mere leaden weight in his chest, inert, refusing to beat.

Every cent of his earnings is sunk into this hop business of his. More than that, he has borrowed money to carry it on, certain of success – borrowed from S. Behrman, offering his crop and his little home as security. Once he fails to meet his obligations, S. Behrman will foreclose. Not only will the railroad devour every morsel of his profits, but also it will take from him his home; at a blow he will be left penniless and without a home. What will become of his mother – and what will become of the little tad? She, whom he has been planning to educate like a veritable lady. For all that year he has talked of his ambition for his little daughter to everyone he met. All Bonneville knows of it. What a mark for

gibes he has made of himself. How did he ever imagine the Road would permit him to make any money?...

Dyke sits down for a moment on a seat that has been removed from a worn-out railway car to do duty in Ruggles' office. On the back of a yellow envelope he makes some vague figures with a stump of blue pencil, multiplying, subtracting, perplexing himself with many errors.

Dyke, studying the figures on the back of the envelope, comes forward again. "Say," he hazards, "how about this?..."

"We've told you what our rates are, Mr. Dyke," exclaims the clerk angrily. "That's all the arrangement we will make. Take it or leave it."

Dyke moves away and stands for a moment in the center of the room, staring at the figures on the envelope. Dyke goes down the stairs to the street and proceeds onward aimlessly in the direction of the Yosemite House, fingering the yellow envelope and looking vacantly at the sidewalk. There is a stoop to his massive shoulders. His great arms dangle loosely at his sides.

As he goes along, a certain feeling of shame touches him. Surely his predicament must be apparent to every passer-by. No doubt, everyone recognizes the unsuccessful man in the very way he slouches along. The young girls returning from the Post Office, their hands full of letters, must surely see in him the type of the failure, the bankrupt.

Then his rage flames up. By God, *no*, it was not his fault; he has made no mistake. His energy, industry, and foresight have been sound. He has been the object of a colossal trick, a sordid injustice, a victim of the insatiate greed of the monster, caught and choked by one of those millions of tentacles suddenly reaching up from below, from out of the dark beneath his feet, coiling around his throat, throttling him, strangling him, sucking his blood. For a moment he thinks of the courts, but instantly laughs at the idea. What court is immune from the power of the monster. How can he now face his home? How can he tell his mother of this catastrophe? The little tad; how can he explain to her this wretchedness – how soften her disappointment? How keep the tears from her eyes – how keep alive her confidence in him?

Persisting Questions of History

Evaluating Business Practices. It might be said that Dyke was mainly to blame for his own troubles. Do you agree or disagree with this opinion? Why?

Weighing Business Policy. Suppose that you are the president of a railroad in 1875. You have no competition yet in the area served by your line. You are considering two guidelines for setting rates:

- Your "break-even" point – the rates you must charge to make a profit after all your fixed and variable costs are paid.
- "All the traffic will bear" – the maximum rates that shippers seem able to pay in view of the prices they get in the market for their products.

What circumstances will help you decide whether you should follow the first policy or the second?

Why might the prospect of competition encourage you to charge as much as you could before another railroad began to compete? Write a policy statement justifying your decision about guidelines for setting rates.

Thinking About Business and Ethics. Do businesses have ethical obligations to their customers? How do businesses decide on the ethical standards by which they will operate? What evidence can you find that businesspeople think about ethics at all? To what degree can legal systems compel ethical conduct?

Vanderbilt's Defense

In response to growing agitation by leading New York City merchants, the New York State Assembly voted in February 1879 to set up a committee to investigate railroad practices. The chairman of the investigation was Alonzo B. Hepburn.

The legislators soon confessed that they could not handle the job. They therefore summoned representatives of the New York City Chamber of Commerce and Board of Trade to a meeting at which the legislators, in effect, handed over the investigation to the merchants themselves. Clearly, it would not be an impartial inquiry.

Simon Sterne, a supporter of the New York City merchants, was the counsel for the committee. William H. Vanderbilt, the president of the New York Central and Hudson Railroad, was a key witness before the committee. Sterne engaged in a verbal tug-of-war with Vanderbilt on questions of the New York Central's rate practices.

* * * * *

August 21, 1879:

Sterne: Now, do you believe that uniformity of rates is a useful thing?

Vanderbilt: Oh, yes.

Q. And the maintenance of rates a useful thing? **A.** Yes.

Q. And you believe it useful to the railway as well as to the public? **A.** Useful to the whole community.

Q. Do you believe publishing your rates is a useful thing, so that the world may know what they are? **A.** Yes; under that system, providing they can all be equal. If you can get to the point where you have not got to change them every day, I believe in publishing them....

This case is adapted from New York Legislative Assembly, Proceedings of the Special Committee on Railroads (New York: Weed, Parsons & Co., 1879).

Q. This Committee is to understand that during certain times of the year, every day the rate changes? **A.** You know what I mean by that; I don't mean they actually change every day, but they may change one day three or four times a day, and they may not change again in three days. They change frequently before a telegram would go from Chicago to New York....

Q. What determines that change? **A.** Competing roads.

Q. Is there any understanding between them that determines it? **A.** No.

Q. Mere information brought to your office that a cut rate is offered by another road lower than yours determines you to cut the rate again; is that it? **A.** No.

Q. Then, what determines the change? **A.** The general traffic managers, who have charge of that business, can tell you better than I can.

Q. But you know sufficiently about it to know that the rates change three or four times in a day? **A.** Yes, they are very variable.

Q. Are not you consulted as to the change of the rate? **A.** No, I do just what the other folks do.

Q. How do you know what the other folks do? **A.** They have their means of knowledge, and they can tell you; I cannot....

Q. Do the rates from Syracuse to Utica change in the same way three times a day? **A.** They change very frequently.

Q. How frequently? **A.** About as frequently as a man comes into the office to ask for it.

Q. And that is the uniformity that you are in favor of? **A.** No; I am opposed to it. I can't help it....

(Sterne quoted a letter by Vanderbilt to the Chamber of Commerce Committee in which the railroad president denied that the New York Central gave special rates to certain customers.)

Q. How do you reconcile that statement with the fact that there have been produced before this Committee the books of the New York Central Railroad, showing that within a period of about eight months there are 6,000 cases of special rates at least given to various parties throughout the state of New York, differing from your schedule rate? **A.** I will tell you; I took that communication and read it to the general manager of our company, Mr. Rutter; I asked if every word of that was true; and he told me yes, it was true, every word of it...and I signed it....

Chairman Alonzo B. Hepburn: Don't you know, Mr. Vanderbilt, that you have got a number of thousands of special contracts in force on your road? **A.** Only from what I have seen in the evidence.

Q. Don't you know it from your experience in connection with the road? **A.** No; I know there are a good many special rates given, but not several thousand....

Q. Then, at the time that you put your signature to that letter, you did not know, as I understand you to say, that special rates were given through the state of New York to special shippers, as contradistinguished from the schedule rates? **A.** Yes I did; I always knew it.

Q. You always knew it? **A.** Yes; you can't run the road without it....

Q. What notice, if any, do you send out to the world, by which shippers at all these points may know that they can make special rates at your office? **A.** That is generally known all through the state. We don't advertise the notice....If a man is going to move from Syracuse to Lockport, or from one place to another anywhere around the state, he comes down to the road to get a special rate on it. If he moves from here up to any part of the country, he comes in the office to get a special rate.

Q. Have you ever made any inquiry as to the effect of special rates upon business that did not receive special rates? **A.** I don't know that I get your meaning.

Q. For instance, if you, as a common carrier, carry goods for one man to Syracuse at nine cents a hundred, and charge another man 30 cents a hundred, or 28 cents a hundred for the same goods, have you ever made any examination of whether or not it tends to make practically a monopoly of the one man's business and drives the other man, to whom you do not give such a special rate, out of the business? **A.** The people themselves, in that business, look after that pretty well.

(Another confrontation between Vanderbilt and Sterne took place on the questions of railroad competition and state regulation. Sterne suggested that "the growth of the community and its development...every birth in New York... and every additional family that moves from Europe to this country" brought benefits to the railroad. Vanderbilt replied that the railroads were doing "their full share" toward commercial prosperity, spending $6 million a year in the state and putting at least $2 million more a year into new facilities. He maintained that rate cuts by his railroad would lead to a "war of extermination" with other roads.)

Hepburn: Don't you think it would be better to go to Congress and have this matter in a general way regulated, in advance of any such war of rates? **A.** I am not opposed to general legislation by the general government on this question. I rather favor it....

Q. You think then, as far as the general government is concerned, it would be wise and be to the interest of the public and the interest of the railroads? **A.** My ideas differ from those of most people on that subject. I say that the general government, as well as the legislatures in all the states, have the interest of persons throughout the country who have invested their monies in this kind of property, in charge, and they are entitled to the protection of the government and the protection of the legislatures of the different states just as much as the general public who have no monetary interest. And I am in favor of Congress making such laws, and making their observance so strict with forfeitures, if you please, that there is no danger of their being violated. But when they make maximum rates, I am in favor of their protecting the investors by making minimum rates as well. That is to say, if they catch a man deviating from a rate by making a lower rate than is prescribed by law, that they should punish him with equal severity as the man who should make a maximum rate. That is not popular, maybe, but I think capital is entitled to some protection in this country, as well as other interests.

Q. There is no question but that corporate property is just as much entitled to protection as any other kind of property. The trouble is, corporate property arrogates to itself certain powers and does certain things that the public generally complies of. **A.** Congress, I suppose, would have that matter entirely in its power and could regulate it.

Q. You don't suppose that under the Federal Constitution that permits them to regulate interstate commerce, that they could enter into and regulate the affairs in any one state?**A.** No sir; but I think if Congress should act upon it, the states themselves, if they needed any further protection, would protect themselves against any abuse, so far as they

were concerned....I believe when a committee from the legislature, or any other body of men, come to look upon all the questions – and this transportation question, you know, is one of the greatest questions in this country – when they come to look upon it and understand it they will not take from the hands of the railroad people themselves the power of transacting their business as between each other, and give it to any set of men who certainly do not know any more than they do....Suppose you had a store; that you were in the boot business, or shoe business, or any other business, and you were a creature of the legislature, and you had been educated and brought up in that business, and it was conceded that you were master of it and knew your business, and the legislature should appoint some man to walk into your store and direct how you should do it. You probably would sell out, wouldn't you?

Sterne: Is that a parallel case? **A.** I think so.

Q. Do you think that the position of a great public highway is the same as the having of a shoe store? **A.** No, sir; I think when the legislature grants a charter to any set of men to do business and they invest their means in it the legislature has those people in their power all the time. If they violate any stipulations or contracts which they have made with the state they are subject to be hauled up. I believe in that to the fullest extent....

Q. Do you think that the legislature is a tribunal competent to understand the extremely delicate and complicated questions of railroad management? **A.** Quite as much so as any civilians without any experience in railroad matters, and those are the gentlemen that are generally appointed for that purpose.

Q. Would not those civilians learn by constant experience? **A.** A man clothed with that power thinks he knows right away. He knows it all before he gets the facts.

Q. He will be set right, like a great many others have been, probably? **A.** In the meantime you will be ruined. Every man has his own opinion about those things; I have always been brought up to conduct my own business – anything that I had in my charge – and I think all the gentlemen on the committee and every other gentleman in the community has; and when I can't, then I will get out. I will leave.

Persisting Questions of History

Developing Arguments. Vanderbilt faced a stream of hostile questions in the legislative hearings. Suppose you were a lawyer for the New York Central; you were given the chance to question Vanderbilt. Write three questions that you would ask him. Ask them in a way that would draw answers favorable to the railroad's position.

Examining Regulatory Methods. A great many methods of business regulation by government have become familiar in modern times:

- Fixing specific rates or prices or a *range* of rates or prices
- Limiting a company's size
- Limiting the percentage of total business that any company would be permitted to do
- Encouraging weak companies to join with other companies
- Giving low-interest loans to help start new companies
- Discouraging the formation of new companies by refusing charters and licenses
- Setting standards for scheduling and performance
- Requiring safety features for the benefit of customers or workers
- Forbidding the use of inefficient equipment
- Limiting the percentage of profits a company can make
- Limiting or expanding the area in which a company can operate
- Aiding companies that are in financial difficulty or want to expand
- Controlling how a company sells stock or borrows money
- Setting a minimum level for workers' pay

Only two of these methods of government regulation had been applied to U.S. railroads by 1870. Mark these two methods with a check (✓). Then put a plus sign (+) in front of any methods of regulation that you think should have been established in 1880. Explain why you favor these methods (or favor none of them).

What are the strengths and weaknesses of each approach as a way of promoting the public interest? Be sure to consider tax costs of each form of regulation.

When does government regulation become government control?

An Overview of Opposition to the Railroads

The meeting of the railroad presidents, Commodore Vanderbilt's testimony, and Dyke's financial ruin suggested that something was seriously wrong with the railroads. No one associated with the railroads seemed to be satisfied. Owners, workers, businesses, and farmers all complained that the railroads were not operating as they should. The following overview looks at those complaints and some of the responses to them.

* * * * *

Competition was driving many railroads to bankruptcy. In the eight years between 1880 and 1888, almost one-fourth of the railroads were absorbed by larger lines with greater financial resources. Still the owners complained that the high costs of railroading and continuing competition threatened economic collapse for all.

Employees struggling to unionize complained that competition that motivated cost cutting often meant that wages were reduced. In addition, the economic cycle with its boom and bust pattern meant that qualified workers were being laid off during down times and inexperienced ones created a safety hazard when they were hired during good times. The cost of safety devices also limited their use. Owners saw safety as another unnecessary expense in a competitive world. Without a doubt, railroading was dangerous work. Thousands were maimed and killed yearly without workers' compensation or adequate safety provisions. Railroad managers argued that railroads were so widespread and technically complex that determining responsibility for an accident was impossible. Moreover, one or two men did not have legal ownership and responsibility, which resided in a vast group of stockholders. If workers struck against these conditions, state and federal governments used their troops to protect the railroad owners' interests. Bloody riots occurred and millions of dollars of railroad equipment were destroyed in strike-related violence, but the full weight of law and government stood behind the railroads.

Merchants and businesses also denounced the railroads. Differences in shipping rates could ruin these people in one locale while being a boon to those in another. If a major line serving a seaport started a rate war, the merchants and manufacturers in that city would pay considerably less to ship goods than their competitors in other cities. Obviously, those with a lower shipping cost could do more business than

their competitors, who had to pay higher shipping costs and therefore charge more for their goods. The businesses that could not compete blamed their financial ruin on the railroads. Other businesses complained that competitors received rebates and other favors that allowed them to sell their goods for less.

Farmers added their voice to the chorus complaining about the railroads. In some cases, they had obtained their land from the railroads and still owed them money. Foreign competition, over-production, and declining prices all applied financial pressure to the farmers. As the farmers struggled to make ends meet, they argued that the railroads used a variety of unfair practices – for example, charging more per mile for shorter hauls than for longer ones. In 1869 farmers had to pay 20 cents a bushel to ship grain 200 miles from the Mississippi to Chicago, while the rate for the 850-mile distance between Chicago and New York, a distance more than four times as long, was only 40 cents per bushel. Railroad managers contended that labor for loading and unloading goods, rather than the actual costs of moving them, accounted for a substantial part of their expenses; these costs were the same for short or long hauls. Farmers also resented the rebates that railroads gave to large-volume shippers. Finally, when farmers examined their meager incomes and considered how much shipping added to their expenses, they became outraged at what they felt were excessive railroad rates.

While Dyke was teetering on the brink of personal disaster, his sister, Missy, living in Illinois, was facing a similar financial crisis. Like Dyke, she and her husband were farmers. They lived about 150 miles from Chicago, growing wheat on a 160-acre homestead. Life was hard working in the fields 15 hours a day, hoping that sun and rain would appear in the right amounts at the right times. Like her brother, Missy and her husband had seen the railroads, grain dealers, grain elevator and storage owners, and other representatives of big business gobble up their farm's meager profits. All of the farmers they knew were angry about what they saw as abuses of power by businesses.

Periodic meetings of a farmers' organization, the Grange, gave the farmers an opportunity to vent their anger, discuss the situation, listen to speakers, and encourage each other. These meetings helped give farmers the courage they needed to act against the railroads and other businesses they felt were threatening their livelihoods.

The Grangers realized that individually they were powerless to protect their interests, but that there was strength in numbers. They also realized that by electing representatives sympathetic to their needs, they

might be able to harness the power of government to protect them. Since farmers were a large part of the population, men with Granger sympathies eventually won legislative seats in Illinois and other states and municipalities. In many areas, these representatives began to pass bills regulating the railroads and other businesses affecting farmers.

These legislative acts became known as the Granger laws. They sought to address the grievances of the farmers in a variety of ways. For example, some required railroads to charge less for short hauls than for long hauls while others outlawed rebates and other forms of preferential pricing. Others required that all rates be posted and available for public scrutiny. As you might expect, many railroads and other businesses opposed these attempts to regulate them and often violated them in order to test their legality in court.

Persisting Questions of History

Analyzing Complaints Against the Railroad. List the groups who felt that railroads weren't working properly. Show their complaints about the railroads and possible solutions. Do you think the complaints were justified? Why or why not?

Analyzing the Granger Laws. To what extent did the Granger laws address the complaints of each group you listed above? Identify a contemporary law designed to protect the consumer. How is this law similar to or different from the Granger laws?

The Railroads and the Supreme Court

The following cases examine regulatory issues that came before the U.S. Supreme Court during the late 1800s. The cases reflect the Court's initial willingness to allow the states to regulate railroads, its insistence that Congress assume its constitutional role in this regard, and the cynical uses of regulation to promote a sense of public trust while allowing competitive forces to run rampant and disregard the public interest.

* * * * *

Munn v. Illinois (94 U.S. 113)

In 1862 Munn and Scott leased land and built a grain storage facility in Chicago. Farmers could store grain at the facility by paying an agreed-upon price. Grain in the elevator came from all across the Midwest. During the early 1870s, on the basis of an Illinois law, Chicago began to require that all grain storage facilities purchase a license from the city, agree to certain procedures, and not charge above a certain fee for storage. Because they felt the law was unconstitutional, Munn and Scott did not purchase a license, violated the procedures, and charged double the set rate. The state took them to court to enforce the law; eventually the case was appealed to the U.S. Supreme Court.

The lawyers for Munn and Scott contended that the Illinois law was unconstitutional because it violated the second clause, section 8 of Article I of the Constitution, which gave Congress exclusive power to regulate interstate trade. They also argued that the law violated Article One, section 9, clause 6, which prohibited Congress from regulating trade in a manner that favored one port or state over another. Third, they observed that the Fifth Amendment prohibited the federal government from depriving anyone of their property without due process. Finally, they contended that the law violated the Fourteenth Amendment because it required states to protect the same individual rights that the federal government had to guarantee. The lawyers argued that Chicago, by setting maximum rates, was actually depriving the owners of the full use of their property. Without the law, they could have made more money from their property. Thus, the law was unconstitutional.

The lawyers for Illinois argued that the law dealt with establishments within the city and therefore was not regulating interstate trade. They also contended that businesses that served a public interest had often been regulated and that the law did not deprive the owners of their

property rights without due process. The lawyers noted that the legislation was designed to protect the public from the power of monopoly, since all the grain storage facilities in the city were controlled by seven or eight firms. The Illinois Constitution of 1870 had specifically called for public protection from monopolies. Illinois' lawyers also indicated that the constitutional provision excluding legislation that favored one port or location over another applied only to Congress, not to states or other governments.

Questions for Conversation

1. Read and discuss the meaning of the sections of the Constitution cited above. Then explain what facts in this case were most important. What legal issues were raised? What were the best arguments for each side of the issue? What decision would you make and why?

2. Read the quotation below from the Court's decision:

> A government may regulate the conduct of its citizens toward each other, and, when necessary for the public good, the manner in which each shall use his own property....When the owner of property devotes it to a use in which the public has an interest, he in effect grants the public an interest in such use, and must to the extent of that interest, submit to be controlled by the public, for the common good, so long as he maintains that use.

What was the court saying? What are the implications of the court's theory for railroads? What aspects of this case might appeal to railroad owners and what problems might they see with it?

Who do you think won the case? What evidence supports your position? Do you agree with the court's reasoning? Why or why not?

Wabash & Co. v. Illinois (118 U.S. 557)

The *Munn* case seemed to establish the ability of state governments to control any activities within their borders by businesses in which the public had an interest. An 1876 Supreme Court case, *Peik v. Chicago and Northwestern Railway Co.* (94 U.S. 164), also seemed to support the right of state governments to regulate railroad activities within, and even to some extent outside of, their boundaries. In this case, Wisconsin tried to exert its authority to control fares on an Illinois railroad that had recently merged with a Wisconsin railroad. In this decision the court

stated, "Until Congress acts in reference to the relations of this company to interstate commerce, it is certainly within the power of Wisconsin to regulate its fares and company, so far as they are of domestic concern." Incidentally, these may reach beyond the state, indirectly affecting those without.

In 1886 another railroad rate case, *Wabash and Co. v. Illinois* was appealed to the Supreme Court. The Wabash Railroad charged more for hauling similar weight goods to New York from Gilman, Illinois, than from Peoria, Illinois. Yet Gilman was 86 miles closer to New York and the 86-mile difference was all in Illinois. Illinois law prohibited railroads from charging more for hauling similar weight and class goods a shorter distance than for a longer distance. Since the goods traveled an identical distance once they left Illinois, the state charged the railroad with violating its law.

The Court ruled that the Illinois law was unconstitutional because the state was trying to regulate interstate commerce, an area constitutionally reserved for Congress. It observed, "A statute of a state, intended to regulate or tax or to impose any other restriction upon the transmission of persons, property, or telegraphic messages from one state to another, is not within that class of legislation which states may enact in the absence of legislation by Congress, and that such statutes are void even as to that part of such transmission which may be within the state." The court ruled that Illinois could legitimately set rates and regulate railroads that provided service between Alton and Chicago or Cairo and Chicago. The court went on to note that the Illinois legislation forced railroads to charge higher rates just to keep rates uniform.

Questions for Conversation

1. How does the Court's reasoning in this case compare with its decisions in previous cases? Do you agree or disagree with the decision? Explain.

2. What are the implications of this decision for any attempt to regulate railroads? (Remember: mergers and growth had reduced the number of railroads while increasing the size of those remaining.)

Interstate Commerce Commission v. Alabama Midland Railway Co.

The Wabash decision forced Congress to recognize the need for national legislation. The court had clearly indicated that the states could not regulate the railroads beyond their borders. Variations in state legis-

lation resulted in an unworkable patchwork quilt of conflicting laws and statutes. Only Congress had the constitutional authority to create nationally consistent laws.

By this time, railroad customers had acquired an important ally in promoting federal regulation, the railroad leaders themselves. While the railroad users wanted lower rates, the owners sought stable rates. By the 1880s the experiences of the various pools had convinced railroad leaders that federal regulation could benefit their economic interest. With the support of the railroads now thrown behind regulation, Congress soon passed the Act to Regulate Commerce, later known as the Interstate Commerce Act.

The new law required that all interstate railroad rates be "reasonable and just." It established a five-person commission to administer and enforce the act. In addition, the act prohibited rebates, pools, and charging higher rates for shorter hauls than longer ones "under substantially similar conditions." It required that all rates be posted and filed with the federal government, and it allowed the ICC to receive complaints from shippers and investigate railroad records.

The commission could not set rates, but it could issue cease-and-desist orders requiring railroads to reduce rates found to be excessive. If the railroads failed to comply, the ICC had no power to force compliance except by appealing to the courts.

While the creation of the ICC appeared to be a solution to many of the problems created by uncontrolled railroad expansion, the ability of the commission to enforce what it saw as the intent of the law was often limited. Consider the following 1897 case:

The Board of Trade in Troy, Alabama, complained to the ICC that the Alabama Midland Railroad was charging considerably higher rates on shipments to and from Troy than it was charging on shipments to and from Montgomery, a larger town 52 miles up the line. For example, Troy merchants paid $.47 to ship a unit of cotton while those in Montgomery paid only $.40 to ship the same amount the same distance. In addition, the Troy merchants charged that their competitors in Montgomery paid less than the published rates. The railroad had a monopoly on service in Troy, while it had to compete with other railroads and river transportation in Montgomery. Because it was larger, Montgomery sent and received a much larger volume of goods than Troy. After reviewing the evidence, the ICC decided that the railroad had indeed violated the ICC regulations. The ICC decision noted that:

> Unjust discrimination as between localities or individuals cannot be essential to the business prosperity of the roads. On the contrary, we believe that in the end, if not immediately, their financial welfare would be promoted by the application in the matter of rate making of the principle of absolute fairness as between all interests, large and small.

Dissatisfied, the railroads appealed the decision and the case went to the U.S. Supreme Court.

Questions for Conversation

1. Assume that you are the lawyer for the railroad. What arguments might you present to justify your rate structure? Assume that you are the lawyer for the ICC. What arguments might you present? Which arguments do you think are the strongest? Why? Which ones reflect the regulatory mission of the ICC and intent of the law?

2. How would you decide the case? Support your answer.

Strengthening the ICC

The Court ruled in favor of the railroad, finding that the situations in Troy and Montgomery were not similar. The competition in Montgomery made that situation substantially different from the situation in Troy. That factor could be considered when setting rates. The Court further said that the prohibition against higher charges on shorter hauls was not absolute. Instead, it left the door open for exceptions in cases where the circumstances and conditions of traffic were affected by the element of competition. The ruling left to the railroad the determination of when circumstances were substantially similar.

Justice Harlan, in a dissent, pointed out that the decision would effectively end the ICC's ability to enforce the regulations it was charged with administering. He noted that the decision made the ICC "a useless body."

Continued pressure for effective legislation that would prohibit the Supreme Court from stripping the ICC of regulatory power eventually resulted in a series of acts. The Expedition Act of 1903 gave priority to court cases of "general public importance" that involved the railroads and the ICC. This reduced the time spent by the ICC in obtaining judicial rulings. The Elkins Amendment to the Interstate Commerce Act (1903) put pressure on railroads to adhere to their published rates. It said that

both the giver and receiver of rebates were to be considered guilty. The Hepburn Act of 1906 enlarged the ICC from five to seven members and gave them power to (1) nullify rates they found to be unreasonable, (2) set reasonable maximum rates that would be binding immediately unless set aside by the courts, and (3) evaluate the property of railroads and base their rate rulings on this estimation of the corporation's worth. Finally, the Transportation Act of 1920 tried to solve the problem of setting rates for weak and strong railroads by instructing the ICC to prepare a plan for the consolidation of the railway properties of the continental United States into a limited number of systems. In preparing such a plan, the ICC was to see that "compensation shall be preserved as fully as possible, and wherever practical the existing routes and channels of trade and commerce shall be maintained."

The ICC was also authorized to take from the railroads any earnings in excess of 6 percent in any one year. This money was to be used to provide loans for railroads or to purchase equipment and facilities for lease to railroads as a way of benefiting the public interest.

Persisting Questions of History

Defining Public Interest. What were the factors of "public interest" that caused the railroads to be regulated at a time when other businesses were not? Consider the specific words of the Supreme Court decision in *Munn v. Illinois*. Should the words *community, public,* and *common good* have been interpreted to mean local communities, states, the nation, or all three? Explain your interpretation.

According to the ICC, what was the "public interest"? Was its definition an adequate one in your opinion?

The Economics of Government Intervention: The Decline of The Railroads

Many railroad users felt that regulating railroad rates and competitive practices would guarantee that the public's interest would be served. Costs would be similar for ton miles of freight regardless of the presence of competitors. But popular demand for stable, low rates may eventually have left the railroads unable to respond to the increasing demands for service. Considerable evidence suggests that increasing governmental control strangled the railroads, deterred investments and capital improvements, and ultimately contributed to their decline. Look for such evidence as you read the following.

* * * * *

Henry Holmes had been a railroad man all his life. He started out in the first half of the 1870s as a ticket agent for the Windom, Wheeze, & Western in a small town in Indiana. He'd worked hard, learned the ropes, and slowly worked his way up through the consolidations of the 1880s. During the revolution of the 1890s and the first half of the decade launching the new century, he'd been in the lead in double tracking his line, purchasing the new steel cars needed to haul more goods in longer trains, and acquiring the powerful engines that dwarfed those of just a few years before. At the turn of the century, it seemed as though the railroads were poised for the dawn of a golden age.

But somehow an insidious worm had gnawed its way into the very core of this utopia. The improvements necessary to keep up with the constantly expanding demands were expensive and required massive infusions of capital. New rails, cars, engines, bridges, ties, roadbed, and signal equipment cost money – and lots of it. Certainly some of this money could come from profits that Watson had thoughtfully reinvested in his line. But much of it had to come from investors, and that posed a major problem.

Ever since the federal government, led by ambitious men with an eye on popular sentiment, had begun to impose controls on what the railroads could and could not do, the situation had gone from bad to worse. It was popular to complain about high rates and railroad abuses, but the common person in the street didn't understand how to run a railroad, especially when virtually everything had to be replaced and improved. The Interstate Commerce Commission had essentially denied the rate increases that the railroads needed to be attractive investments.

When the railroads couldn't make a profit, the investors took their dollars elsewhere and the railroads simply could not acquire the resources necessary to move America's ever-growing volume of goods and crowds of people efficiently.

Regulators hesitant to risk public anger continued to make it difficult for the railroads to raise rates. Meanwhile, rising prices and increasing wages imposed higher operating costs on the railroads. Investors didn't have to be brilliant to figure out that flat revenues and rising costs made the railroads poor prospects. Bluntly put, the line was starving to death because it could not raise the capital needed to provide the transportation services demanded by the country. Shippers couldn't send their goods because there weren't enough cars to handle the orders. Too many trains using the same lines forced delays. Too few engines meant fewer trains and slower deliveries. Lack of capital prohibited expansion to new markets and provision of services to new customers. Insufficient funds meant that trackbeds and equipment might not receive the maintenance they needed to stay in top condition. While these changes might not be visible immediately, they did begin to add up and together would drag the railroads down.

While regulations strangled the railroads, the federal and state governments supported the emerging trucking industry by building roads. The trucking companies were small and decentralized and did not attract the negative public attention drawn by the railroads. The government was making the railroads compete on a playing field that sloped against them while they had one arm tied behind their back. Watson felt that, through no fault of his own, he was being forced to watch regulation destroy the greatest transportation system in the world.

By the 1950s, the once-great U.S. railroads had virtually collapsed. Thousands of miles of track were abandoned, many lines declared bankruptcy, and service was slashed; indeed, passenger service was essentially abandoned to airlines, buses, and automobiles. Accidents caused by worn equipment occurred with monotonous regularity. The construction of the interstate highway system during the 1950s, 60s, and 70s increased the gap between the federally promoted trucking industry and the regulated railroads.

As the end of the 20th century approaches, many U.S. cities suffer from automobile gridlock. Highway construction, while unable to accommodate the growth in traffic, promotes even greater development and use of automobiles. The aging interstate highway system is crumbling, and an increasing percentage of bridges are labeled unsafe. Citizens

choke in exhaust-polluted air and look in vain for efficient, low-cost mass transportation. Meanwhile, Japan and Europe move towards the 300-mile-per-hour trains of the 21st century as U.S. railroads wheeze towards collapse.

Persisting Questions of History

Analyzing Causes. According to Holmes, what problems had regulation created for the railroads? Do you agree that regulation was responsible for the problems of the railroads?

Defining Public Interest. Using the railroads as an example, consider the problem of defining the *public interest* in a given situation. Can aesthetic questions be considered in defining the public interest? How can government regulations be exercised in the public interest? Give examples. Is doing what the majority wants always in the public interest? What should politicians in a democratic society do if they feel the public interest is best served by opposing what the majority wants?

Analyzing Contemporary Regulations. Identify a few governmental regulations in the economy today. What public interests are they apparently trying to protect? What are the consequences of these regulations? Do they actually protect the public interest? Are they the best way to protect the public? Why or why not?

Airline Deregulation

Issues raised by the railroad are still being debated today. The effects of deregulation of the airline industry in the 1980s have again caused people to ask whether government regulation or free operation of market forces best serves the public interest. As you read the fictitious hearing transcript below, look for evidence of the effects of deregulation.

* * * * *

The senators ignored the press of reporters as they walked toward the hearing room. John Lindstrom, junior senator from Minnesota, turned to his colleague, Alice Nichols, senior senator from Pennsylvania, and noted, "Alice, you were here back in 1978 when the bill passed to abolish the Civil Aeronautics Board and governmental regulation of airline fares and routes. Was there this much interest then?"

"Almost, John. This is always a hot topic. Besides, air traffic has increased so much since then that virtually everyone is influenced by airlines and has an opinion about regulation. This hearing is going to be complicated, with lots of good arguments on both sides of the issue. But, it's been a long time since we gave the airlines free rein to fly where they please and charge whatever they want, and it's time for us to examine what has happened.

"We need to be certain that the airlines are operating in the public interest, which is extremely difficult to define. Sure, everyone wants the low costs and frequent service to large areas generated by competition. But low fares may ultimately force a lot of airlines to declare bankruptcy, take short cuts in safety-related areas, and serve cities with lots of travelers while ignoring places that only have a few travelers.

"It's almost time for the hearing to begin. If you want to talk to me later, I'll be available. Since I'm chairing this hearing, I'd better get started. Talk with you later, John!"

Bang! Senator Nichols slammed the gavel and announced that the Senate hearing on the impact of airline deregulation had begun. She called the first witness, Ms. Alwina Rashipurti, the vice president of a

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The hearing in this case is fictional, but authentically represents current circumstances.

bank and a frequent business flyer. Senator Nichols introduced Ms. Rashipurti to the committee and asked her to discuss her airline travel experiences since deregulation.

"Senators," she bagan, "as you know, I travel a lot—usually three to five trips a month. While many of these trips are to our headquarters in New York, I also fly to a wide variety of large, small, and medium-sized cities. Because I have been in this or a similar position for more than 20 years, I have been able to compare the flyer's experience before and after deregulation.

"Airfares differ a lot. I can pay $1102.00 for a coach ticket from Denver, Colorado, to Providence, Rhode Island; however, if I buy that ticket a week before I leave and stay over a Saturday night, it costs me $358.00, a savings of $744. I really don't understand how the fares can be so different, but I've been told that it has something to do with trying to get discretionary passengers to fly and increase the load factor."

Senator Claridge interrupted to explain that a discretionary passenger is someone who really doesn't have to fly to a particular place at a particular time. For example, a family that might take a vacation near home also might fly to Cape Cod if it didn't cost too much. A businessperson who has to attend a meeting in Providence, however, doesn't have any choice. That person has to be there and thus has little discretion in making travel arrangements. Load factor refers to what percent of a plane's seats are filled. A high load factor, 80 or 90 percent, is very profitable, since it doesn't cost much more to fly 150 passengers that it does to fly 60. If an airline can get more discretionary passengers to fly, they can improve their load factor and therefore their profits.

Ms. Rashipurti continued: "Regardless, I don't think that it is fair that when I have a very busy schedule and cannot stay over a Saturday night, I have to pay almost three times what I paid for the same trip a few weeks before."

Senator Crandall interrupted to ask, "On most flights do you think you are paying more or less than you did before deregulation?"

Ms. Rashipurti paused and responded, "It's almost impossible to answer that question. Can you buy a car for what you could in 1978? My best guess would be that, on average, I am paying less today than I would have if regulation had remained in force. However, I suspect this is not always true. When I have to fly into some of the smaller airports, I am probably paying more. On the other hand, when I can take ad-

vantage of discount rates by buying nonrefundable tickets ahead of time and by staying over Saturday night, I do much better than I did before deregulation."

"But, Ms. Rashipurti," asked Senator Claridge, "Don't all of those restrictions that go with low fares really represent a decrease in service and an inconvenience? Suppose your business schedule changes suddenly? Those tickets become worthless!"

"Yes, you are correct," replied Ms. Rashipurti. "Before leaving, I have one more comment that I would like to make. I used to be able to fly directly to most locations from Denver. Now I often have to fly to another big city—the airlines call them hubs—and change planes. If I am flying to a small city, I will probably have to get on a small commuter airplane, and I don't like them at all. Some of the older ones seem pretty safe, but on average they have a much worse safety record than the big airlines. Since deregulation, the larger airlines have pretty much abandoned the smallest cities to the commuter airlines."

Senator Crandall spoke quietly into the microphone as Ms. Rashipurti began to leave, "Excuse me, I have a question I would like to ask before you leave. As an economist with a large bank, why do you think that the commuters have replaced the larger regional and even transcontinental airlines in the smaller towns?"

"Senator, I suspect that it has to do with technology and profits. Remember when I mentioned load factor? In small markets, where only a few people arrive or leave each day, a large jet simply cannot fly there and make a profit. The load factor is too low. The rapid increase in fuel costs during the 1970s and 80s played a role in this situation. A small 15- to 30-seat, twin-engine plane uses a lot less fuel. Because it has fewer total seats, 10 or 15 people can be a profitable load."

Senator Nichols introduced the next witness, Captain Georgia Wilson, a leader in the pilot's union, and asked her to explain her views on regulation.

"Primarily, I'm concerned about my safety and the safety of my passengers. The previous speaker mentioned that the safety record of the commuter airlines is relatively poor when compared to the larger carriers. But that isn't the entire story. I know that the number of fatalities per passenger mile among the large airlines has actually decreased since deregulation. That would suggest that safety has improved. Statistically, I guess it has, but I think we need to consider other evidence.

"For example, a number of airlines have been hit with record fines because of slipshod maintenance procedures. In a competitive environment, don't you think there is pressure to cut corners and save every nickel? I do! And I think that one of the ways some of the more threatened airlines save money is by trying to keep maintenance costs and time down. A plane in a hanger isn't earning money. A check that should take two hours to do, but that is rushed through in an hour, saves time and money, but may risk my life and yours. I know that all of the airlines are supposed to follow the maintenance procedures established by the FAA, but the fines of the past couple of years suggest that they don't all do that.

"I'd also like to raise another safety issue. As many of you know, the airline fleet in this country is getting pretty old. Many planes are now flying when the people who designed them expected them to be resting in a scrap yard. Aircraft are expensive, and it makes economic sense to use them as long as you can. I'm not sure it makes safety sense, though. The pilots' union is very concerned about this issue, and we would appreciate your attention to it. We think that air travel was safer when airlines were regulated and competitive pressure was not so intense that it encouraged saving money at the expense of safety. Thank you."

Senator Lindstrom signaled that he wished to ask a question. "Captain, what you've said makes a certain amount of sense, but I think you might look at this issue from a different direction. Suppose you were the president of an airline. Don't you think you would be concerned about how safe the public thought your airline was? Couldn't there be lost profits if the public avoided your airline because they thought it was unsafe?"

"Senator, I agree with you. I just don't know how the current airline presidents think and which factors they believe are more important in helping them to make money."

Senator Nichols expressed her appreciation to the captain and introduced Frank Presser, a retired airline executive, as the next witness.

"Senators, I deeply appreciate your interest in the topic of airline deregulation. I've been around this field since I was a kid – started out washing old DC3's after school at the airport down the road from home. I was president of Mountain Airlines for 10 years before it merged with another carrier and I bailed out. When the airlines were regulated, we had good years and bad years. The airline industry, as you know, is very

sensitive to economic swings. When times get tough, people cut back on travel. The old Civil Aeronautics Board used to try to make sure that all of us stayed in business. It essentially set the fares and routes and usually tried to help out the operations that were financially weakest. Sure, there were some inequities – like making a bigger percent profit on long distance flights than on shorter ones – but we got folks where they wanted to go at a price that kept us in business.

"With deregulation, it's a whole new ball game. Every airline can charge what it wants and fly where it wants as long as it can get landing slots and gates – a big if. As soon as the regulations were lifted, a whole bunch of folks decided they wanted their own airlines. So they bought a couple of surplus planes, hired pilots and staff, and went off into the wild blue yonder. Most charged rock-bottom prices to attract passengers. And, they were successful. But the older airlines had to cut prices to match them. No big deal at first. Times are good, fuel doesn't cost an arm and a leg, the low prices attract a whole bunch of new travelers, and there's a big enough pie for everyone – or so it seems.

"But then by the early 80s the bottom falls out of the economy. There are fewer travelers and everyone competes even harder for those that are left. Frequent flyer and super saver programs cost money and when times are bad probably have a negative impact on earnings. Pretty soon, the weaker airlines – new ones as well as old ones – begin to go under. In the ten years between 1981 and 1991, 19 airlines filed for bankruptcy protection. Some survived for a couple of years, only to collapse for good.

The entire airline industry today is troubled. Most are losing money. Some of that can be blamed on a poor economy in general, but I think a lot has to do with too much competition. If five airlines fly into a city that can only support two flights a day, something has to give. What gives is profit. Without a profit, there won't be any airlines or service or there will be a monopoly with one airline for the entire country. Only a couple of the major airlines are in decent financial shape. "If you ask me, it looks like we're headed for an airline industry with just a few survivers who will then be able to charge what they want and fly where they want – only the most profitable routes. I'd say the whole deregulation idea looked good in the beginning and for a few years after, but now it's starting to look like a poor move for everyone – consumers, airlines, and the nation's economy. Thank you."

Senator Nichols thanked Mr. Presser and gaveled the hearing adjourned for the day.

Persisting Questions of Modern Life

Weighing Policy. Would you agree or disagree that airline deregulation has been in the public interest? What are your reasons and what evidence supports them?

Defining Public Interest. Below are five possible definitions of the *public interest*. Which, if any, of the definitions do you favor? Why? If you feel that you can improve on these definitions, write your own. What would be the government's policy regarding the airline indusry if the government applied your definition?

- The greatest good for the greatest number.
- The greatest good possible for all of the people.
- The greatest good as expressed by the chosen representatives of the majority of people.
- The greatest good as expressed by the people considered to have the highest intelligence and greatest cultural knowledge.
- The greatest variety of choices for all of the groups that make up the total population.

Analyzing Airfares. Ask a travel agent the cost to fly from your city to a small city and to a large, "hub" city about equal distance. Compare fares with different advance purchase dates and length of stay requirement? What questions do you have after comparing the prices? What conclusions might you draw?

Review, Reflection, and Research

Businesses and the Public Interest

What businesses are "clothed with the public interest"? Consider the standards of "public interest" that seem strongest to you at this point. Then consider two of the ten industries listed below.

Gather facts about the two industries you pick (such as the number of companies, size of largest companies, and questions of price and quality of products and services) from current periodicals and reference works like *The Statistical Abstract of the U.S.* Many U.S. industries, such as railroads, airlines, television and radio stations, telephone companies, and power companies, are treated as *public utilities*. In other words, they are privately owned but open to government regulation in almost everything they do. The industries in the following list are not regulated to such an extent:

- aircraft and rocket manufacturing
- movie-making
- newspaper publishing
- drug manufacturing
- cigarette manufacturing
- automobile manufacturing
- barber and beauty shops
- retail grocery sales
- cosmetics manufacturing
- compact disc manufacturing

In what ways are the industries you picked like or unlike railroads and other public utilities?

Do you think that the industries you picked are "clothed with the public interest" enough to be regulated by the federal government or not? Why or why not?

If you think they should be regulated, what forms of regulation should be imposed? Why?

Establishing Businesses in a New Nation

Suppose that your group is the cabinet of a new nation with a newly industrializing economy. The nation has no railroads, no television-radio

industry, and no retail food stores. You expect large grants from other nations to help you get these three industries started. But what methods will be used to start them?

Consider the major facts about your nation. Most of its population of two million lives on the big Central Plain or in the rainforest fringes around the Plain. These people are seminomadic, moving their entire villages from time to time. Other farm villages, small but more permanent, dot the banks of the Petal River. People in these villages send their small boats to Boujou. With a population of 25,000, Boujou is the nation's capital. Small oceangoing steamers stop at its port. The port could be made much larger, but there have been neither funds nor reasons to do this.

Your nation, however, does have great potential resources of iron ore, bauxite, and tin. The trouble is that these riches lie 300 miles inland, far from either the Central Plain or the Petal River.

Who is to develop these resources? Most of your people have had no more than a primary-school education. The nation does have about 150 people educated abroad in such fields as engineering, economics, and teaching.

Decide whether each of the new industries – railroads, radio-television, and retail food stores – should be:

- owned and operated by the government
- run by private companies, foreign or domestic, without government aid or regulation
- run by private companies, foreign or domestic, under close government regulation
- run by private companies, foreign or domestic, with the aid of government grants and loans

Explain your decisions about each of the three industries by relating them as much as possible to the U.S. experience with railroads and the airlines.

To order this unit or for more information on the Public Issues Series, contact:

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THE RAILROAD ERA: BUSINESS COMPETITION AND THE PUBLIC INTEREST TEACHER'S GUIDE

Public Issues Series Social Science Education Consortium 1991

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The Public Issues Series

The *Public Issues Series* was originally conceived of by the Harvard Social Studies Project of the 1960s and 1970s. The major purpose of the series – both then and now – is to help students analyze and discuss persisting human dilemmas related to public issues. We would emphasize that the term *public issues* is not synonymous with *current events*. By public issues, we mean problems or value dilemmas persisting throughout history and across cultures. The situations of Christian martyrs in Rome, a bureaucrat in Nazi Germany, a slave in 19th-century America, or an Ethiopian refugee in Texas in 1988 all represent important public issues. We believe that most of the important current events can be clarified by reference to public issues in other places and other times. Thus, all the units in the series suggest parallels between historical illustrations of persisting human dilemmas and present issues in the United States and the world.

The units in the series use historical, fictional, and contemporary situations. They also assist students in using a structured approach to issues analysis and in developing the skills of reasoned discussion. The units are not designed to be followed mechanistically through every question. There is no critical sequence of exercises. Teachers should view the materials provided as possible strategies for developing discussion of public issues and should pick and choose among the materials according to their own goals. Teachers should note that students will need information from other sources to discuss some questions intelligently; this may be a factor in deciding whether to have students address those questions.

As classes work with the materials, it is important to give students a sense of progress by periodically summarizing where the cases and discussion have taken them, particularly in terms of their discussion skills and the central questions of the unit.

The Necessary Questions

This unit on the railroad era focuses on the following organizing questions:

- To what extent should individuals and businesses be free to acquire and use property? What limitations, if any, should be imposed on how private property is used?
- What is the public interest in business affairs? Is business competition the most effective way of pursuing that interest? Do the interests of the public and business sometimes require that competition be limited? Can cooperation among businesses effectively meet the interests of both business and the public?
- What is the role of the government in protecting the interests of both business and the public? Does government have a responsibility to consider or mitigate the consequences of new technology it promotes?

Fictional cases, primary source documents, and secondary sources are used to acquaint students with how these questions have manifested themselves in U.S. history. The first section of the book looks at the development of the railroads, how that development differed from the development of other industries, and the problems or challenges that resulted. Students then participate in a simulation designed to give them firsthand experience with some of the issues. The next section focuses specifically on the problems of competition: what they were, how railroads tried to deal with them, and how successful these attempts were. The final historical section of the unit then looks at early efforts to regulate the railroads by government. Finally, students examine deregulation of the airline industry as a contemporary analogy related to the government's role in safeguarding public and business interests.

Analyzing the Issues

In analyzing the necessary questions of the unit, students will grapple with ethical-value questions, definitional issues, and issues of fact-explanation. For example, students define the public interest (definitional issue), identify railroad practices that were detrimental to the public interest (fact-explanation issue), and discuss whether government regulation was an appropriate response to such practices (ethical-value issue).

As students work through these and other issues, they should practice the explicit stating of issues and use of analogy to clarify their positions. The following classroom discussion on the case, "Dyke's Bonanza," illustrates the use of analogy in a discussion that involves both economic and ethical issues of public policy:

Student 1: It's too bad, but it was Dyke's own fault. He should have read the rate schedule. (*Takes position defending the railroad, in essence advocating a "buyer beware" principle.*)

Student 2: What if he had read it? What could he have done? (*Accepts the principle but raises more general problem by stipulating a change in the circumstances.*)

Student 1: Dyke could have refused to ship the crops. (*Claims Dyke did have an alternative course of action.*)

Student 2: But he needed money to pay off his mortgage to the railroad. He would have lost his farm under either condition. Is it right for the railroad to have such economic power over Dyke that he would lose his farm no matter what he does? (*Identifies unfortunate implications of the "alternative," and frames general issue in terms of economic monopoly.*)

Student 1: But railroads have a right to make money. (*Shows importance of another value—right of private business to make a profit.*)

Student 2: What if a butcher discovered he could make lots of money by selling slightly spoiled meat, and several people died. Would you allow that? (*Uses analogy to try to get Student 1 to qualify the general value of free enterprise.*)

Student 1: No. Maybe the government should do something—make railroads publish more frequent rate schedules. (*After considering analogy, student modifies earlier position and accepts minimal form of regulation.*)

The teacher's role in the discussion process is that of a questioner and clarifier. Another important teacher function is summarizing the progress students have made. Students may not readily perceive the ways in which their thinking has changed during a discussion, but a teacher synopsis of the questions examined and the strategies used to support positions can reinforce students' engagement in the discussion process.

Teaching the Unit

Each Public Issues unit can be taught in a variety of ways. The following is one way to approach *The Railroad Era: Business Competition and the Public Interest*. Note that you need not cover all the issues or questions provided in the unit. Your curriculum as well as student interest and engagement may dictate the issues on which you decide to focus.

Preparing to Teach the Unit. In general, students have a shallow understanding of the American economic system. They believe that free enterprise and competition are good and that centralized planning and monopolies are bad. Yet they frequently do not understand important aspects of the system and often do not see how economic issues play themselves out in "real life."

To engage student interest in the economic issues presented in this unit (and to introduce the idea that it is quite acceptable to change one's mind in examining public issues), begin by reading the following vignette to students:

Rob was the best cook in his home economics class. So many people complimented him on the cookie recipes he had developed that he decided to set up his own cookie-baking business. His parents thought the business was a great idea and agreed to help him pay for a refrigerator and an industrial-size oven to be installed in the basement. After six months, Rob had repaid his parents and was clearing a small profit each week. He was even able to pay his mother a small salary for handling his tax forms and other financial matters. His main customers were two local restaurants, three grocery store chains, and a day care center. Each customer sent a truck or car over to pick up cookies early every morning—about 5:30 a.m.

In Rob's eighth month in business, the police served him with two citations—one for violating health codes and one for violating zoning ordinances. The area in which he lived had not been zoned to allow for home businesses. Rob was furious. What gave the government the right to interfere with how he and his family used their private property?

Ask students whether they think there is any need for the government to regulate Rob's business, beyond the collection of taxes. Allow several students to give their opinions and ask for a show of hands on agreement or disagreement with the stated opinions. Then read the remainder of the story:

Rob's next-door neighbors had turned him in to the city. They were concerned about several aspects of the business. First, the constant early-morning flow of traffic disturbed their sleep and that of their children at an unreasonable hour. Second, Rob's business generated more trash than a normal family would produce. Garbage cans next to Rob's parents' garage attracted stray animals and insects that could be hazardous to the neighborhood. Finally, the neighbors had been appalled when visiting Rob's family to notice how dirty Rob's baking area was. He might be a great cook, but he wasn't a clean one!

Now ask students whether this information changes any of their opinions on the regulation of Rob's business. Does the public interest in a quiet and clean neighborhood, as well as food prepared in a sanitary environment, override Rob's right to use his private property as he wishes? Allow time for students to discuss the issue, stressing that it is acceptable to change your opinion. You may wish to point out that conceding a point in a discussion is often associated with qualification. For example, a student who had opposed any regulation of Rob's business might concede that some restrictions on traffic and sanitation were appropriate but that the total ban on home businesses was not.

Tell students they are going to be looking at how the public interest can be balanced with individuals' and businesses' right to acquire and use private property in a unit on the development of American railroads. A key question in the unit will be the government's role in balancing these two interests.

Introducing the Unit. Assign students to read pages 3-5 of the unit. Review with students the methods for supporting or challenging claims related to each type of issue:

Type of Issue	Strategies for Supporting/Challenging Claims
Ethical-value issues	Use of value-laden language Use of a respected source Prediction of a valued consequence Identification of a conflicting value Use of analogies
Definitional issues	Stipulation Use of a respected source
Fact-explanation issues	Reference to common knowledge Personal observation Use of a respected source Demonstration of consistency with other well-established claims

The Development of Railroads. The first case in this section, "Mr. Morrison's Proposal," describes a debate in a state legislature regarding whether the state should help finance construction of a railroad, canal, or neither. After students have read the case (if appropriate for your class, a dramatic enactment of the case might be presented), discuss which arguments were most persuasive for each legislator who spoke. Have students identify the strategies for dealing with various kinds of issues the speakers used, if any. The first "Persisting Question of History" following this case asks students to take the roles of other legislators and develop positions on which form of transportation to support. After students have prepared their positions, allow time for discussion, again examining which arguments were most persuasive. As a follow-up to this case, ask

students to identify local or state projects, such as roads, airports, rapid transit systems, or other public improvements that may encourage growth and economic development in some areas and not in others. How are the arguments being presented for and against these projects similar to or different from arguments presented in "Mr. Morrison's Proposal"? Do students agree that governmental decisions may promote the interests of some citizens at the expense of others? Can a decision that benefits one group in particular also promote the general interest? What criteria should governments use in making decisions of this nature? Challenge students to use examples from their state or community to support their positions.

The next reading in this section, "The Railroad Comes to Louisburg," expands consideration of varying interests in economic growth and technological change to include those directly affected by changes but often having little voice in decisions related to the change. The "Persisting Questions" ask students to identify positions various individuals would take in the Louisburg case as well as a contemporary case involving light rail. To focus attention on how technological developments cause social change, ask students to write brief descriptions of life in Louisburg five years after the railroad is built.

"Railroad Growth, 1830-60" provides a historical overview against which students can check the information in the preceding case studies. Methods that governments used to help railroads are described in the reading. These methods can be compared with methods governments today use to attract businesses. Competition among cities for professional sports teams could provide a contemporary analogy of interest to students.

The final reading in this section, "The Challenge of Running a Railroad," lays out many of the problems faced by railroad operators. Students could develop proposed solutions to the problems and compare these solutions to those developed by the railroads (which will be covered in subsequent sections).

The Railroad Game. The purpose of the Railroad Game is to help students understand pressures of business competition and the various ways competitors can respond to a monopolistic buyer. The effectiveness of the game depends upon the students' realizing restraints on themselves as railroad presidents and independently devising ways of dealing with the situation. Obviously, the purpose of the game and the expected outcome should not be explained to students beforehand.

The teacher will probably wish to play the role of the mineowner, since this role involves the most complicated strategies and since only the mineowner is in a position to keep competition alive, encourage the making and breaking of pools, and direct the course of the game by other tactics. After a few rounds, the students will probably form a pool – they will agree among themselves on a standard price and then divide the proceeds among themselves no matter which railroad wins each day's bidding. The teacher might encourage this by pointing out that each railroad loses money when it fails to win a bid.

The teacher should not interfere with the making of agreements among the players, but the teacher, in the role of mineowner, will probably want to encourage the breaking of pools. The mineowner can use various strategies to keep competition alive, since he/she profits from competition; these strategies might include requiring secret bids and sometimes awarding the contract to a railroad other than the lowest bidder.

The teacher should remind players of the importance of the calculations on the tally sheet at the close of each round. It may also be necessary to remind students firmly that, because of the existence of fixed costs, they lose money even when they carry no goods. The forms for playing the game are provided on pages 7-8 of this guide. The forms should be separated before being distributed to the teams, since it is vital that the teams do not at first know each other's financial position.

In discussing the game after playing it, the teacher can raise at least two issues: competition and possible responses to it and the legitimacy and enforcement of contracts. If the students became involved in the game and if they responded strongly to one team's breaking the pool or the mineowner's breaking a contract, it may be best to start with the specific issue of cheating and the breaking of promises. It has been found that students often can objectively discuss what they have learned only after this issue is resolved.

The following points should be extracted from the students' experiences during the game:

- Competition among the railroads gave the mineowner an advantage. By dividing business enough to keep several railroads operating, the mineowner could use competition to his/her advantage.
- Even if they did not run, the railroads had to pay fixed costs (e.g., interest on loans). Variable costs increased or decreased depending on the number of trains operated.
- Because of fixed costs, making some money – even while sustaining a loss – was better than

having no income at all. This fact – and the competition – drove each railroad to try to charge the lowest price.

- Intense competition could bankrupt less efficient railroads or those having higher fixed costs or less capital. In some situations, the amount of traffic simply couldn't support all the railroads competing for it.
- The dynamics of competition ultimately promoted schemes to decrease competition. These schemes include rate-fixing, taking turns bidding, sharing costs and dividing income, and several other techniques.
- Maximum use of personnel and equipment could increase profits but undermine safety.
- Although the shipper derived great advantage from competition, uncontrolled competition that resulted in a monopoly could ultimately harm the shipper. That is, if one railroad consistently underbid the others and the mine-owner only used that railroad, the others would eventually go out of business. The remaining railroad could charge any price it wished.
- Formation of pools allowed railroads to mitigate the impact of competition, but they were difficult to maintain since great profits could go to anyone who secretly violated the pool agreement and cut rates.
- Losses on lines with competition could be made up by overcharging on lines without competition.
- The intense competition which placed financial strain on railroads made them more amenable to public cries for regulation. Railroads saw it as a means of ending the destructive competition and guaranteeing a fair rate of return.

Questions to stimulate student discussion might include the following:

- To what extent did competition promote the public interest?
- To what extent did competition violate the public interest?
- Does competition seem to be self-renewing or self-eliminating?

Consolidation and Competition. This section focuses on changes in the economic environment within which the railroads operated in the latter half of the 19th century. The pressures on railroads are examined, along with the problems faced by railroad users. Students' understanding of these dual sets of problems could be enhanced through the reading of biographies of great railroad men (Oscar Lewis, *The Big Four*; F. Lewis Allen, *The Great J. Pierpont Morgan*) and stories about the plight of ruined storekeepers (Bernard Malamud, *The Assistant*, or "The Cost of Living" in *Idiots First*).

After reading "Dyke's Bonanza," remind students that many railroads went bankrupt during this period. Discuss who seemed to benefit and who was harmed by unfettered competition. If you were Mr. Behrman, how could you justify ruining farmers like Dyke? What arguments might both farmers and railroad owners offer to support some restrictions on competition?

In the last set of "Persisting Questions" in the section, students consider various methods of business regulation by government. Look for examples of regulation in the media. Invite a businessperson and a representative from a regulatory agency to discuss the costs and benefits of regulation. Consideration of methods of regulation will provide a transition to the next section of the unit.

Railroads and Government Regulation. The readings and questions in this section focus heavily on defining the term *public interest*. You might encourage students to look in the newspaper for examples of business or government actions that serve or undermine the public interest. Students might also interview businesspeople, labor leaders, and government officials to determine (1) how they define the *public interest*, and (2) the extent to which they consider the public interest in making decisions.

In discussing whether private enterprise should be regulated by the government, you might present students with the following analogies:

Analogy 1: Suppose the U.S. government needs military equipment to fight a war – planes, bombs, ships, tanks, etc. Factories do not have the money required to start production. The government loans the companies large sums to get the factories moving. Do you think that is right?

Analogy 2: Suppose officials in the government, believing that a one-party system would be better for the country, give tax incentives and large subsidies to businesspeople who make financial contributions to their political campaigns, but give no help to businesspeople who belong to the opposing party. Do you think that is right?

Analogy 3: Suppose one oil company grows so large that it controls 90 percent of the oil products marketed and has driven out all other competing firms. It then hikes the price of oil so high that, in order to pay for fuel, people must cut way down on

all other expenses. Fuel is so expensive that people cannot afford proper diet or medical care. Should government break the monopoly?

In the section on "The Railroads and the Supreme Court," an excerpt from the Court decision in the Munn case is given, although the decision is not explained. The Court held that the state could regulate business activities within their borders if the business was one in which the public had an interest.

In considering the reading on "The Economics of Government Intervention," you might encourage students to make some international comparisons. How does the level of government regulation of business in the United States compare with that in other countries with "free market" economies? in socialist countries? in former members of the Communist Bloc?

Today's Issues. This section uses airline deregulation as an analogy to the case of the railroads. A fictitious hearing examining the effects of deregulation is presented; the account is designed to stimulate students to conduct additional research on how deregulation has affected individuals and the industry. You might divide the class into five groups, tasking each group to come up with testimony representing a different interest. The class could then conduct a simulated hearing based on the reading and their research. The "Persisting Questions" ask students to reconsider their definitions of the *public interest* and to determine whether deregulation was in the public interest. An investigation of airfares is also suggested. To expand on this investigation, have students research fares prior to and after deregulation, using inflation rates in making comparisons. To supplement the information provided, you might invite an airline pilot to discuss how deregulation has affected the industry from his/her perspective. You might also invite a representative of a regulated or recently deregulated industry (e.g., trucking, telephone, gas, electric, television) to discuss the benefits and disadvantages to the company and consumer of regulation/deregulation.

Review, Reflection, and Research. These exercises include writing, research, and discussion. You may assign them selectively for completion by individual students or small groups, or they can be used as topics for large-group discussion and reflection on the unit. They can also be used for evaluation purposes.

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Railroad Game Bid Slips

Name of railroad .....

..... trains at $ ..... ea.

..... trains at $ ..... ea.

..... trains at $ ..... ea.

Name of railroad .....

..... trains at $ ..... ea.

..... trains at $ ..... ea.

..... trains at $ ..... ea.

Name of railroad .....

..... trains at $ ..... ea.

..... trains at $ ..... ea.

..... trains at $ ..... ea.

Name of railroad .....

..... trains at $ ..... ea.

..... trains at $ ..... ea.

..... trains at $ ..... ea.

For the Mineowner

Your mining business obviously has an advantageous position in relation to the four competing railroads.

Your firm makes a profit of about $500, minus transportation costs, for each trainload of ore.

The railroads are disadvantaged by their competitive situation. They have cut their costs as far as possible. If necessary, you can continue operating at the break-even point with wagon deliveries much longer than they can endure. The pressures of the railroads' competition against each other, however, should make it unlikely that you would have to use wagons for any long period.

In spite of your advantages, you should take every opportunity to maximize your profit by driving the cost of transportation down to the railroads' break-even point, or even below it if you can bargain hard enough. (One exception: You *want* the railroad competition to continue because you benefit from it. What might happen to you if one railroad were to achieve a monopoly? Thus you may decide at some point to award business to a railroad that is *not* the low bidder but appears to be on the verge of failing.)

Railroad 'A' Budget

Engines and Rolling Stock:
2 trains, each having 1 steam engine and 10 freight cars

Cash on Hand: $200

Fixed Costs:

Maintenance and replacement of capital equipment	Cost per Day $ 9.00
Interest on bonds	16.00
Principal on bonds	15.00
Common Stock dividends	10.00
Total Fixed Costs	$ 50.00

Variable Costs: (Paid when trains run.)

Crew wages (5 men at $2 a day each), per train	$ 10.00
Fuel and supplies, per train	10.00
Total Variable Costs	$ 20.00

Break-Even Chart: (Minimum charges needed to cover costs.)

Number of trains used:	ONE	TWO
Fixed Costs:	$50.00	$50.00
Variable Costs:	20.00	40.00
Total Costs:	$70.00	$90.00
Break-Even Point:	$70.00	$45.00

Railroad 'B' Budget

Engines and Rolling Stock:
2 trains, each having 1 steam engine and 10 freight cars

Cash on Hand: $200

Fixed Costs:

Maintenance and replacement of capital equipment	Cost per Day $ 9.00
Interest on bonds	16.00
Principal on bonds	15.00
Common Stock dividends	10.00
Total Fixed Costs	$ 50.00

Variable Costs: (Paid when trains run.)

Crew wages (5 men at $2 a day each), per train	$ 10.00
Fuel and supplies, per train	10.00
Total Variable Costs	$ 20.00

Break-Even Chart: (Minimum charges needed to cover costs.)

Number of trains used:	ONE	TWO
Fixed Costs:	$50.00	$50.00
Variable Costs:	20.00	40.00
Total Costs:	$70.00	$90.00
Break-Even Point:	$70.00	$45.00

Railroad 'C' Budget

Engines and Rolling Stock:
3 trains, each having 1 steam engine and 10 freight cars

Cash on Hand: $240

Fixed Costs:

Maintenance and replacement of capital equipment	Cost per Day $ 12.00
Interest on bonds	15.00
Principal on bonds	13.00
Common Stock dividends	20.00
Total Fixed Costs	$ 60.00

Variable Costs: (Paid when trains run.)

Crew wages (5 men at $2 a day each), per train	$ 10.00
Fuel and supplies, per train	10.00
Total Variable Costs	$ 20.00

Break-Even Chart: (Minimum charges needed to cover costs.)

Number of trains:	ONE	TWO	THREE
Fixed Costs:	$60.00	$60.00	$60.00
Variable Costs:	20.00	40.00	60.00
Total Costs:	$80.00	$100.00	$120.00
Break-Even Point:	$80.00	$50.00	$40.00

Railroad 'D' Budget

Engines and Rolling Stock:
3 trains, each having 1 steam engine and 10 freight cars

Cash on Hand: $240

Fixed Costs:

Maintenance and replacement of capital equipment	Cost per Day $ 12.00
Interest on bonds	15.00
Principal on bonds	13.00
Common Stock dividends	20.00
Total Fixed Costs	$ 60.00

Variable Costs: (Paid when trains run.)

Crew wages (5 men at $2 a day each), per train	$ 10.00
Fuel and supplies, per train	10.00
Total Variable Costs	$ 20.00

Break-Even Chart: (Minimum charges needed to cover costs.)

Number of trains:	ONE	TWO	THREE
Fixed Costs:	$60.00	$60.00	$60.00
Variable Costs:	20.00	40.00	60.00
Total Costs:	$80.00	$100.00	$120.00
Break-Even Point:	$80.00	$50.00	$40.00

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TALLY SHEET

MINEOWNER	ROUND	1	2	3	4	5	6
NUMBER OF TRAINLOADS	POSTED						
	SENT						
	REQUIRED TO MEET CONTRACT						
CONTRACT AWARDED	WINNING BID						
	COMPANY AWARDED BID						

RAILROADS	ROUND	1	2	3	4	5	6
RAILROAD "A" 2 TRAINS	Cash on Hand	200					
	(+) Day's Income						
	TOTAL CASH						
	(–) FIXED COSTS	50	50	50	50	50	50
	(–) VARIABLE COSTS: $20/TRAIN						
	TOTAL COSTS						
	NEW CASH BALANCE						
RAILROAD "B" 2 TRAINS	Cash on Hand	200					
	(+) Day's Income						
	TOTAL CASH						
	(–) FIXED COSTS	50	50	50	50	50	50
	(–) VARIABLE COSTS: $20/TRAIN						
	TOTAL COSTS						
	NEW CASH BALANCE						
RAILROAD "C" 3 TRAINS	Cash on Hand	240					
	(+) Day's Income						
	TOTAL CASH						
	(–) FIXED COSTS	60	60	60	60	60	60
	(–) VARIABLE COSTS: $20/TRAIN						
	TOTAL COSTS						
	NEW CASH BALANCE						
RAILROAD "D" 3 TRAINS	Cash on Hand	240					
	(+) Day's Income						
	TOTAL CASH						
	(–) FIXED COSTS	60	60	60	60	60	60
	(–) VARIABLE COSTS: $20/TRAIN						
	TOTAL COSTS						
	NEW CASH BALANCE						

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